Filing Receipt

Received - 2021-12-02 02:46:06 PM
Control Number - 51023
ItemNumber - 947

SOAH DOCKET NO. 473-21-0247
PUC DOCKET NO. 51023

APPLICATION OF THE CITY OF SAN ANTONIO TO AMEND ITS CERTIFICATE OF CONVENIENCE AND NECESSITY FOR THE SCENIC LOOP 138 KV TRANSMISSION LINE IN BEXAR COUNTY	**§**	**BEFORE THE PUBLIC UTILITY COMMISSION OF TEXAS**

CPS ENERGY'S SECOND MOTION TO ADMIT NEED INFORMATION REQUESTED BY COMMISSIONERS

December 2, 2021

SOAH DOCKET NO. 473-21-0247
PUC DOCKET NO. 51023

APPLICATION OF THE CITY OF SAN ANTONIO TO AMEND ITS CERTIFICATE OF CONVENIENCE AND NECESSITY FOR THE SCENIC LOOP 138 KV TRANSMISSION LINE IN BEXAR COUNTY	**§ § § § § §**	**BEFORE THE PUBLIC UTILITY COMMISSION OF TEXAS**

CPS ENERGY'S SECOND MOTION TO ADMIT NEED INFORMATION REQUESTED BY COMMISSIONERS

TABLE OF CONTENTS

SOAH DOCKET NO. 473-21-0247
PUC DOCKET NO. 51023

APPLICATION OF THE CITY OF SAN ANTONIO TO AMEND ITS CERTIFICATE OF CONVENIENCE AND NECESSITY FOR THE SCENIC LOOP 138 KV TRANSMISSION LINE IN BEXAR COUNTY	**§**	**BEFORE THE PUBLIC UTILITY COMMISSION OF TEXAS**

CPS ENERGY'S SECOND MOTION TO ADMIT NEED INFORMATION REQUESTED BY COMMISSIONERS

TO THE HONORABLE COMMISSIONERS OF THE PUBLIC UTILITY COMMISSION:

The City of San Antonio, acting by and through the City Public Service Board (CPS Energy) files this motion, consistent with the directive of the Commissioners of the Public Utility Commission of Texas (Commission) at the open meeting on November 18, 2021, and memorialized in the prior Order Remanding to Docket Management. As set forth below, CPS Energy undertakes to provide the information that CPS Energy believes the Commission is requesting,[1] and requests that the supplemental documents attached to this motion be admitted for purposes of the record. Further, CPS Energy representatives and counsel will be at the next open meeting scheduled in this docket and will be available to discuss the data, calculations, and other attachments and answer any questions the Commissioners may have. CPS Energy requests that this matter be set for the December 16, 2021 open meeting if possible.

I. INTRODUCTION

On October 28, 2021, the Commission considered this docket at its regularly scheduled open meeting. At the conclusion of the Commission's consideration of this matter, the Commissioners requested that CPS Energy provide additional information to assist the Commissioners in their evaluation of this project, and memorialized their request in an Order

[1] Although CPS Energy believed the Commissioners were initially seeking updated load growth information and nearby utility mapping information, it is clear from the Commissioners' comments at the open meeting on November 18, 2021, that CPS Energy's understanding was mistaken. Although CPS Energy believes there are significant differences between this project and Docket No. 50812, the information presented in this filing is, as applicable, structured around the July 14, 2021 memo from Commissioner McAdams in Docket No. 50812. If CPS Energy's filing remains insufficient after addressing the criteria in Commissioner McAdams' memo, it will promptly provide any additional specific information the Commissioners identify is still needed by them.

Remanding to Docket Management. At the open meeting on November 18, 2021, the Commissioners indicated that the information provided by CPS Energy after the previous open meeting did not satisfy their prior request. Therefore, they again requested that CPS Energy provide additional need information. CPS Energy appreciates the additional opportunity to address the Commission's concerns and is endeavoring by this filing to provide all of the information the Commissioners may be seeking in this docket.

II. INITIAL NEED DEMONSTRATION

CPS Energy filed its application in this docket in July 2020. At that time, CPS Energy based its need demonstration upon two criteria: (1) reliability needs, and (2) load growth needs. Even apart from any load growth data, calculations, or projections, reliability needs would fully justify the need for this project. This is likely the reason why, even with more than a hundred landowners participating in this case, no party challenged the need for the project. Even if they have opposed certain routes, local landowners understand the need for increased transmission capability to support reliability enhancement in the area. The reliability data was included in the application and the testimony and exhibits presented in this docket.

CPS Energy understands the Commissioners are establishing the need standards they would like to see in new transmission line cases. As set forth in this filing and its previous filing, CPS Energy has attempted to comply with applicable Commission guidance. CPS Energy's load growth need was determined based upon a direct review of prior load growth on the substations in the area, the expected load growth trends shown by historic load growth, and a knowledge of the general development in the area (which matched the load growth trend shown by the historic growth).

The Commissioners have requested the calculations used to justify the need. The calculations and data demonstrating the need are found in Attachments 5, 6, and 7. The calculations that CPS Energy used to demonstrate the load growth need were based on calculation of historical demand and demand growth (approximating 7.84 percent annually from 2014 onward), as shown by the underlying feeder data; then CPS Energy followed its DP Design Manual 2019 processes for forecasting that provided conservative growth rates (between 5 percent and 3 percent annually) to that data, finding that continued growth of this magnitude would exceed the capabilities of the existing transmission and distribution infrastructure in the area by 2025. CPS Energy considered

ancillary data, like the SA Tomorrow Plan and UTSA Master Plan, anecdotally to verify the historical load growth data and projections for future load growth. Thus, while the anecdotal information regarding expected future residential and commercial development was utilized to objectively corroborate CPS Energy's load growth forecasts, such forecasts were not based on detailed calculations projecting housing or commercial development growth in this instance.

There is no disagreement that CPS Energy's need analysis is correct (as shown by updated actual load data demonstrating that actual growth has exceeded CPS Energy's projections at the time the application was filed). Commission Staff reviewed the project and found it needed. Even experts hired by intervening landowners found the project needed. Two independent ALJs found the need for the project to be shown by the evidence in the record before them. Thus, it is with this background in mind that CPS Energy presents the additional need demonstration data requested by the Commission.

III. ADDITIONAL LOAD GROWTH NEED INFORMATION

Based on the Commission's remand order and the July 14, 2021 memo from Commissioner McAdams in Docket No. 50812, CPS Energy understands the Commissioners to be requesting the following information:

1. The SA Tomorrow Plan Document;

2. The UTSA Plan Document;

3. The data used to calculate any load-growth projections in native format;

4. A written description and map of the need study area used to support need for the proposed transmission facilities. This map should include and identify the location of all existing transmission facilities within and around the study area, the location of any proposed substations or switching stations, and the boundaries of the routing study area and the need study area;

5. A thorough explanation of the assumptions made and relied upon to create any load growth projections, including, but not limited to:

    - rates of load growth,
    - factors applied to calculate forecasted loads for new developments in the need study area, and
    - adjustments made to forecasted loads to account for utility service provided by other utilities also certificated within the need study area

6. If the applicant used new development loads to calculate any load growth projections, a map showing the following:

- the locations of current consumers of the utility whose distribution facilities are evaluated in the purpose and need study,
- the locations of new development projects relied on to create any load growth projections,
- the locations of the existing load and new load centers,
- the boundaries of the need study area and routing study area,
- the locations of all existing transmission facilities within and around the need study area, and
- the locations of any proposed substations or switching stations

7. If multiple utilities are certificated to provide distribution service within the need study area, a map showing the boundaries of each utility's service area.

8. An analysis of the feasibility and cost effectiveness of distribution alternatives must include one or more distribution alternatives that use the same point(s) of connection and endpoint(s) and that are routed along the same alternative routes as the transmission-level line that is requested to be approved.

9. Comprehensive direct testimony with supporting workpapers describing the need for the proposed transmission facilities.

10. A comparative cost analysis between all distribution alternatives or necessary distribution upgrades and the proposed transmission facilities that isolates the distribution alternatives costs to support the new or additional load from general load growth.

Each of the categories of information identified above are addressed below in this filing and through the affidavit of George Tamez (Attachment 1 to this filing) and the additional attached documents. Moreover, in his affidavit, Mr. Tamez explains the calculations made to obtain CPS Energy's load growth forecast and provides the data underlying the forecasts.

1. SA Tomorrow Plan Document

The load growth in the area is driven by the explosive population growth and development in the area, and that growth is reflected in the City of San Antonio's Comprehensive SA Tomorrow Plan, an exhaustive plan designed to study and address the growth throughout the San Antonio area. That 330-page plan document is Attachment 2 to this filing, and Attachment 2A to this filing is the UTSA Area Regional Center Plan that was adopted as a sub-plan under the SA Tomorrow Plan and which covers the study area involved in this application. Further, Attachment 3 is a

summary of the findings and assumptions made from the SA Tomorrow Plan (and the incorporated sub-plan, the UTSA Area Regional Center Plan), as well as a more detailed identification of statements from the SA Tomorrow Plan's UTSA Area Regional Center Plan and the assumptions made by CPS Energy based upon those statements. To be clear, however, CPS Energy did not use the SA Tomorrow Plan or the sub-plan to specifically make load growth projections. Rather, CPS Energy's load growth projections were made based upon its historic feeder load data in the area and the trends shown from such data. CPS Energy then used the SA Tomorrow Plan and sub-plan as anecdotal corroborative support for the projections that were made from the historic feeder load data.

2. UTSA Master Plan Document

Future load from the University of Texas at San Antonio (UTSA) Main Campus Master Plan (presented in February 2020) will significantly drive growth (population, housing and related needs for infrastructure development) in the northwest region of Bexar County. The 124-page UTSA Main Campus Master Plan is Attachment 4 to this filing. As with the SA Tomorrow Plan and sub-plan, this report was not used specifically to make load growth projections, but rather was used anecdotally to corroborate the projections and trends shown by historic feeder load growth data.

3. The data used to calculate any load-growth projections in native format

The data used by CPS Energy to calculate the load growth projections is taken from the historic substation and feeder load values, which are identified and described in Attachment 5 to this filing. Attachment 5 provides the load forecast for the study region along with the historical trend. Attachment 6 is the historic feeder data underlying the data shown in Attachment 5, and Attachment 7 is the historic transformer data underlying the data shown in Attachment 5. The historic load values provided for the study area are based on the following information:

- Substation Transformer Peaks Selected from PI. The OSI PI system utilized by CPS Energy continuously monitors the loading on the substation transformers that reflects the aggregate of the total load of all the feeders served from that transformer. The historical peak load data included in the load forecast is based on the information from the PI system for the years 2014-2021. See Attachment 7.
- Selected Feeder Data. The OSI PI system also captures individual feeder load values and data included in the spreadsheet are the peaks recorded on each individual feeder in the study area. See Attachment 6.

To make its load growth projections, CPS Energy compiled the substation transformer peak data from the underlying data, which included both transformer data and underlying feeder data. That data demonstrated peak demand each year on each of the substations (including on the underlying transformers and feeders). This peak data was then entered into a spreadsheet. This spreadsheet demonstrated a clear growth trend that, when normalized, reflects a rate of growth of approximately 7.84 percent annually for the seven years between 2014 and 2021. This is the data that CPS Energy used to calculate its load growth projections, which are discussed in more detail under subsection 5 below.

4. A written description and map of the need study area used to support need for the proposed transmission facilities. This map should include and identify the location of all existing transmission facilities within and around the study area, the location of any proposed substations or switching stations, and the boundaries of the routing study area and the need study area

CPS Energy is attaching a map depicting the electric utility facilities in the area of the project and showing the routing study area. This map is Attachment 8 to this filing. Because the need study area map relied on by CPS Energy shows all distribution lines, it would be infeasible to overlay it on the map showing all of the other utility facilities, proposed substation sites, and boundary lines previously requested by the Commission without effectively eliminating the ability to read the map details adequately. Therefore, CPS Energy is attaching, as Attachment 9, a separate map depicting the need study area with the routing study area overlaid on it. Therefore, by comparing the routing study area shown on both maps, each map can be easily cross-referenced with one another to see all relevant details requested by the Commission.

As noted previously, the study area is entirely within CPS Energy's certificated service area. There are no other utilities having electric transmission facilities within the service area. LCRA Transmission Services Corporation (LCRA TSC) owns the northern portion of the Ranchtown to Menger Creek 138 kV transmission line to which the project is proposed to connect, as well as other transmission facilities to the north of the project study area. LCRA TSC's facilities are outside of the study area however. LCRA TSC is aware of this project and has expressed no opposition to it.[2]

[2] See Attachment 2 to CPS Energy's application (June 10, 2020 letter from LCRA TSC).

CPS Energy understands that Bandera Electric Cooperative, Inc. (BEC) and Pedernales Electric Cooperative, Inc. (PEC) are certificated to provide electric distribution service to the west and north of the CPS Energy's singly-certificated service territory, respectively. CPS Energy does not have detailed engineering maps demonstrating the exact boundaries of the service territories of either BEC and PEC and has not been able to obtain that level of detailed information from those cooperatives in time to present that information on the mapping provided in this filing. However, BEC directed CPS Energy to its website with general boundary information and PEC provided a map with limited boundary information on it, and CPS Energy used that data to identify, to its best understanding, the general BEC and PEC distribution service areas on Attachment 8.

5. A thorough explanation of the assumptions made and relied upon to create any load growth projections, including, but not limited to: (a) rates of load growth, (b) factors applied to calculate forecasted loads for new developments in the need study area, and (c) adjustments made to forecasted loads to account for utility service provided by other utilities also certificated within the need study area

The methodology used and calculations made to create the load growth projections are detailed at pages 3-4 of the affidavit of George Tamez, Attachment 1 to this filing, where he walks through the process for calculating the load growth projections. As noted by him, the load forecasts for the study area are based on the historic load growth presented within the spreadsheet contained in Attachment 5 to this filing. The assumptions made and relied upon are shown below.

a. Rates of Load Growth

CPS Energy followed its DP Design Manual 2019 processes for forecasting and the rates of load growth forecasted are as follows: (a) 5 percent for years 2022 through 2024; (b) 4 percent for years 2025 and 2026; and (c) 3 percent for years 2027 through 2031 (see Attachment 5, First Tab entitled "Scenic Loop Area Load Growth" at line 40, rows B through K). Average historic load growth from 2014 through 2021 has been approximately 7.8 percent per year (see Attachment 5, First Tab entitled "Scenic Loop Area Load Growth" at lines 26-27, rows C through I). The assumed load growth rates of 5 percent, 4 percent, and 3 percent were subjectively determined in an effort to be conservative but also recognize the historic load growth trend and expected future growth.

In total, greater than 50 percent load growth has been recorded over the past seven years on the circuits in the need study area, with large increases of 13 to 15 percent registered in some

years, and an overall normalized average of 7.84 percent annually. The OSI PI data of feeder level peak loads is shown for each year in Attachment 6. The historical data also indicates that Fair Oaks Ranch Transformer #1 load is at more than 80 percent of its normal rating since year 2017. Per CPS Energy's planning criteria, distribution feeders and transformers are maintained under 80 percent of the normal rating by shifting loads between feeders to manage loading levels.

As shown in Attachment 5, approximately 4.3 percent normalized load growth is forecasted by CPS Energy over the next ten years (see Attachment 5, First Tab entitled "Scenic Loop Area Load Growth" at line 41, rows B through K). This forecast is based on CPS Energy's DP Design Manual 2019 processes that utilizes historic growth rates, and validated by outside reports, SA Tomorrow and UTSA Master Plan demonstrating significant and higher confidence level of continued growth defining infrastructure need in the area. This forecast projects a 70 MW growth over next ten years, compared to similar significant growth experienced for the historical past seven years. Growth of 5 percent for the near term three years, 4 percent for the midterm, and 3 percent for the longer term within the ten year plan was used by CPS Energy as a conservative estimate which is approximately half of the historic normalized growth.

b. Factors Applied to Calculate Forecasted Loads for New Developments in the Need Study Area and Supporting Assumptions

1. Factors and Considerations Applied

CPS Energy did not use any specific new developments to forecast new load in the study area. Rather, CPS Energy looked at historic growth rates in the load served by the La Sierra and Fair Oaks Ranch substations. CPS Energy then considered the general known growth occurring and forecasted for the area, giving consideration to a variety of factors that were reviewed subjectively to corroborate the growth projections and not explicitly quantified. These factors included the following criteria identified in CPS Energy's forecasting processes:

Feeder Level Forecasting Criteria:

- Determine normal configuration demand peak and corresponding power factor.
- Gather known information about future residential development.
- Gather known information about future commercial & industrial development.
- Gather known information about existing and future distributed generation.
- Gather known information about existing and future demand response customers.
- Review general conditions of feeder service area.

- Review past feeder historic values.
- Review planned projects for impact to feeder configuration and demands.

Power Transformer Forecasting Criteria:

- Gather demand peak and corresponding power factor for each distribution feeder.
- Review general conditions of transformer service area.
- Review data about existing and future dedicated feeder distributed generation.
- Review past feeder historic values.
- Review planned projects for impact to transformer serving area requirements.
- Develop demand forecast by combining distribution feeder loads (non-coincident).

Substation Forecasting Criteria:

- Gather demand peak and corresponding power factor for each power transformer.
- Review general conditions of substation service area.
- Review past feeder historic values.
- Review planned projects for impact to serving area requirements.
- Adjust actual demands by temperature index relative to 5 year average to get this year's base
- Develop non-coincident demand forecast by combining power transformer demand forecasts.
- Develop non-coincident to coincident factor
- Apply factor to determine coincident demand forecast for transmission planning.

System Level Forecasting

- Gather demand peak and corresponding power factor for each substation.
- Review known information about existing and future demand response customers.
- Review general conditions of system service area.
- Review past feeder historic values.
- Develop demand forecast by combining substation demand forecasts (non-coincident).

While not all of these criteria are individually documented when the forecasting process is conducted, Attachments 5, 6, and 7 reflect the documentation compiled as a result of applying the factors above.

2. Assumptions

In considering the factors described above, CPS Energy considered and applied the following assumptions.

- CPS Energy followed its DP Design Manual 2019 processes for forecasting, including load normalization to reduce annual variation. Actual recorded demands are statistically adjusted by temperature index relative to five year average to find an equivalent base each year.

- Forecasting individual substation growth is based on information known about the area (Large loads, data centers and other customer load growth)[3] and applied to the base demand calculated for each circuit. Erratic growth rates in some years reflect load switching between stations that are outside the study area, using temporary excess capacity.

- Basing the load forecast from substation and feeder level historical loading data, CPS Energy follows subdivision development, commercial large loads, grid connected distribution generation plants in the study area to support the forecasted peak in the near term (one-two years).

- As described with the original application and subsequent load forecast data, the load growth percentage is greater in the near term i.e., 5 percent for the years 2022 through 2024 and reduced to 4 percent for 2025 and 2026, and then dropped to 3 percent for the future years, 2027-2031 to account for growth uncertainty, but overall a growth value much lower compared to the historical growth trend recorded in the region was used so as to be conservative.

- As discussed in the original filing, CPS Energy has experienced consistent and significant growth in the area over the last seven years, resulting in an approximately 50 percent cumulative increase in load in that time. CPS Energy has also considered the SA Tomorrow forecast from the city and information on the total anticipated residential dwelling units and the amount of square footage of commercial/industrial development from the Comprehensive Plan report that potentially needs to be served out of the circuits with in the Scenic Loop study area. The total additional electrical load reasonably projects to approximately 8-9 MW/year of load growth in the region. Considering the targeted growth scenario projected by SA Tomorrow, by 2040 this additional load equates to approximately 160-180 MW using the Baseline forecast scenario and could be as high as approximately 300 MW using the Targeted forecast scenario. This anecdotal corroborating information supports CPS Energy's staggered growth forecast for the area of 5 percent to 3 percent. CPS Energy is forecasting a conservative estimate since the percentage growth forecast is approximately half of the historic normalized growth.

---

[3] *See, e.g.*, the recent announcement of the $500 Million San Antonio Spurs Northwest Side campus. *See* Attachment 10.

c. Adjustments Made to Forecasted Loads to Account for Utility Service Provided by Other Utilities also Certificated within the Need Study Area

CPS Energy is singly certificated to serve all of the load within the portion of its service territory addressed by the project. Thus, as CPS Energy has noted previously, there are no other utilities certificated to provide service within the need study area. Therefore, as no other utility can legally serve any of the load served by the proposed project, no adjustments were made to forecasted loads on account of this consideration.

6. If the applicant used new development loads to calculate any load growth projections, a map showing the following: (a) the locations of current consumers of the utility whose distribution facilities are evaluated in the purpose and need study, (b) the locations of new development projects relied on to create any load growth projections, (c) the locations of the existing load and new load centers, (d) the boundaries of the need study area and routing study area, (e) the locations of all existing transmission facilities within and around the need study area, and (f) the locations of any proposed substations or switching stations

As discussed above, the load forecast calculation data presented in the application is based on projections from actual historical substation and feeder loads on the system. Specific new development was considered and evaluated as corroborating anecdotal verification for the load growth projections shown by historic growth trends. Namely, CPS Energy did not specifically utilize new load requests, load interconnections, or new developments (other than just "general" load growth in the area) to develop the specific data presented in the load growth forecasts in the application. Thus, this factor is not applicable to the calculations performed by CPS Energy in this proceeding. Note, however, given the significant new residential and commercial development of which CPS Energy is aware (see Attachments 2, 2A, 3, and 4), CPS Energy's forecasted 5 percent to 3 percent growth in the area is extremely conservative. CPS Energy is forecasting a conservative estimate, using a percentage growth forecast that is approximately half of the historic normalized growth.

7. If multiple utilities are certificated to provide distribution service within the need study area, a map showing the boundaries of each utility's service area

The need study area is entirely within CPS Energy's service boundaries, and no other utilities are certificated to provide distribution service within the need study area. Therefore, this criteria is not applicable to this case.

8. An analysis of the feasibility and cost effectiveness of distribution alternatives must include one or more distribution alternatives that use the same point(s) of connection and endpoint(s) and that are routed along the same alternative routes as the transmission-level line that is requested to be approved

As noted in previous filings, a distribution alternative will not suffice to address the need for the project, as the need is based upon both insufficient transmission capacity in the area as well as reliability problems with the current distribution system. The analysis of distribution alternatives is set out in detail in the application and in CPS Energy's filing of November 8, 2021, and thus is not restated here. Because there is no existing substation in the project area, it is impossible to present distribution alternatives going to the endpoints proposed, as all such endpoints are new substation sites proposed for the area. And without a transmission connection for such proposed new substation alternatives, such substation cannot be built. Therefore, this criteria is not applicable.

9. Comprehensive direct testimony with supporting workpapers describing the need for the proposed transmission facilities

The direct and rebuttal testimony of George Tamez, the direct testimony of Staff witness John Poole, and the direct testimony of intervenor experts Hal Hughes and Mark Turnbough[4] (all of which are already contained in the evidentiary record) demonstrate the need for the project. In addition, CPS Energy is offering the sworn affidavit of George Tamez along with this filing (as Attachment 1), along with all of the underlying data, to address all of the additional need data and information provided herein. Upon its admission, it has the same force and effect of testimony. Similarly, the affidavit of George Tamez admitted by order of the PUC's ALJ on November 8, 2021, also has the force and effect of testimony. Thus, CPS Energy understands it has fully complied with this requirement.

10. A comparative cost analysis between all distribution alternatives or necessary distribution upgrades and the proposed transmission facilities that isolates the distribution alternatives costs to support the new or additional load from general load growth

A detailed analysis of distribution alternatives is set out in the application, as well as in CPS Energy's filing of November 8, 2021. Because CPS Energy has not relied on any specific

[4] Although these two intervenor experts did not analyze need in detail, both experts offered testimony acknowledging the established need for the project.

new development or specific load growth, it cannot separate such from its general load growth (which was the basis for the application's load growth projections). Thus, CPS Energy believes it has fully complied with this requirement to the extent applicable.

IV. MOTION

In accordance with the Order Remanding to Docket Management dated November 2, 2021, CPS Energy requests the Commission admit into evidence in this proceeding the documents attached to this pleading (Attachments 1-10).

V. CONCLUSION

CPS Energy presented significant uncontroverted evidence regarding the need for the project, which was supported by Staff and experts for some parties, and was not controverted by any parties. No party has challenged the need for the project. In total, 33 alternative routes have been identified for possible consideration in this proceeding. These 33 routes connect the existing Ranchtown to Menger Creek 138 kV transmission line with alternative site options for a new substation to be built (the new Scenic Loop Substation).

All 33 routes address the need for the project and are viable and constructible, including Routes Z2, P, and Y. All 33 routes comply with PURA § 37.056 and 16 TAC § 25.101(b)(3)(B), including the Commission's policy of prudent avoidance. Accordingly, CPS Energy requests that the Commission admit the documents attached to this pleading and grant CPS Energy's application to amend its CCN to construct the project along whichever route the Commission deems most appropriate.

Respectfully submitted,

/s/ Kirk D. Rasmussen

Kirk D. Rasmussen
State Bar No. 24013374
Craig R. Bennett
State Bar No. 00793325
Jackson Walker LLP
100 Congress Avenue, Suite 1100
Austin, Texas 78701
(512) 236-2000
(512) 691-4427 (fax)
Email: krasmussen@jw.com
Email: cbennett@jw.com

ATTORNEYS FOR CPS ENERGY

CERTIFICATE OF SERVICE

I certify that a copy of this document was served on all parties of record on this date via the Commission's Interchange in accordance with SOAH Order No. 3.

/s/ Kirk D. Rasmussen
Kirk D. Rasmussen

SOAH DOCKET NO. 473-21-0247
PUC DOCKET NO. 51023

APPLICATION OF THE CITY OF SAN ANTONIO TO AMEND ITS CERTIFICATE OF CONVENIENCE AND NECESSITY FOR THE SCENIC LOOP 138 KV TRANSMISSION LINE IN BEXAR COUNTY	**§**	**BEFORE THE PUBLIC UTILITY COMMISSION OF TEXAS**

CPS ENERGY'S SECOND MOTION TO ADMIT
NEED INFORMATION REQUESTED BY COMMISSIONERS

Attachment 1

Affidavit of George J. Tamez, PE

SOAH DOCKET NO. 473-21-0247
PUC DOCKET NO. 51023

APPLICATION OF THE CITY OF SAN ANTONIO TO AMEND ITS CERTIFICATE OF CONVENIENCE AND NECESSITY FOR THE SCENIC LOOP 138 KV TRANSMISSION LINE IN BEXAR COUNTY	§ § § § § §	**BEFORE THE PUBLIC UTILITY COMMISSION OF TEXAS**

AFFIDAVIT OF GEORGE J. TAMEZ, PE

STATE OF TEXAS § § §

Before me, the undersigned authority, George J. Tamez, P.E., being first duly sworn, deposes and states:

"My name is George J. Tamez, P.E. I am a professional electrical engineer employed by the City of San Antonio, acting by and through the City Public Service Board (CPS Energy), as Director of Grid Transformation and Planning. My business address is 500 McCullough Ave, San Antonio, Texas 78215. I am over the age of twenty-one, and am competent to make this affidavit.

"On behalf of CPS Energy and in my capacity as Director of Grid Transformation and Planning, I am sponsoring and providing the attached documents, labeled as Attachments 2 through 10, and which consist of the following documents:

Attachment 2:	SA Tomorrow Plan
Attachment 2A:	UTSA Area Regional Center Plan
Attachment 3:	Findings and assumptions made from the SA Tomorrow Plan (and the incorporated sub-plan, the UTSA Area Regional Center Plan)
Attachment 4:	UTSA Main Campus Master Plan
Attachment 5:	Scenic Loop CCN-RFI_Historical_Growth_Rate_Data (Excel File)
Attachment 6:	R0 and U1 Feeder Peak Data (Underlying Feeder Data for Growth Projections)
Attachment 7:	R0 and U1 Transformer Peak Data (Underlying data)
Attachment 8:	Utility Facilities Map with Routing Study Area Boundary
Attachment 9:	Need Study Area Map
Attachment 10:	News Article Announcing $500 Million San Antonio Spurs Northwest Side campus

"The documents listed above were prepared, compiled, or obtained under my direction and the information contained within those documents is true and correct to the best of my knowledge.

"Attachment 2 is a copy of the SA Tomorrow Plan. Attachment 2A is a sub-plan prepared under the authority of the SA Tomorrow Plan and is referenced and incorporated into the SA Tomorrow Plan. Attachment 3 is a summary of the findings and assumptions made from the SA Tomorrow Plan (and the incorporated sub-plan, the UTSA Area Regional Center Plan), as well as a more detailed identification of statements from the SA Tomorrow Plan's UTSA Area Center Regional Plan and the assumptions made by CPS Energy based upon those statements. Attachment 4 is the UTSA Main Campus Master Plan, demonstrating that future load from the University of Texas at San Antonio Main Campus Master Plan (presented in February 2020) will significantly drive growth in the northwest region of Bexar County. CPS Energy did not use Attachments 2 through 4 to specifically make load growth projections. Rather, CPS Energy's load growth projections were made based upon its historic load data and the trends shown from such data. CPS Energy then used Attachments 2 through 4 as anecdotal corroborative support for the projections that were made from the historic load data. In the same way, Attachment 10 is corroborating anecdotal support for CPS Energy's expected load growth in the area.

"Attachment 5 contains the data used to calculate load growth projections and the calculations and load growth projections themselves, and such is taken from the historic substation level and feeder load values that are contained in Attachment 6 (the historic feeder data underlying the data shown in Attachment 5) and Attachment 7 (the historic transformer data underlying the data shown in Attachment 5).

"Attachment 8 is a map depicting the electric utility facilities in the area of the project and showing the routing study area. Attachment 9 is a map showing the need study area. Because the need study area map relied on by CPS Energy shows all distribution lines, it would be infeasible to overlay it on the map showing all of the other utility facilities, proposed substation sites, and boundary lines previously requested by the Commission without effectively eliminating the ability to read the map details adequately. Therefore, CPS Energy presents Attachment 9, a separate map depicting the need study area map with the routing study area overlaid on it. By comparing the routing study area shown on both maps, each map can be easily cross-referenced with one another so as to see all relevant details requested by the Commission.

"I have more than 24 years in the electric utility industry and have been employed by CPS Energy since 1996. During that time, I have become familiar with and implemented CPS Energy's load forecasting methodologies. Because of the time it takes to build transmission facilities, it is always critically necessary—to ensure the reliability and availability of electricity—to begin building transmission facilities prior to reaching or exceeding load demands on existing facilities. I have found CPS Energy's methodologies to be accurate and reliable for projecting load growth and have found that CPS Energy's load predictions and load growth forecasts have been historically accurate and reliable, and such have been proven accurate when viewed in retrospect.

"In this case, I and other CPS Energy personnel used the standard CPS methodologies set out in this affidavit to predict future load growth. Those methodologies involved the following steps:

1. **Review historic load values for the study area based on the following information**:

   (a) Substation Transformer Peaks Selected from PI. The OSI PI system utilized by CPS Energy continuously monitors the loading on the substation transformers that reflects the aggregate of the total load of all the feeders served from that transformer. The historical peak load data included in the load forecast is based on the information from the PI system for the years 2014-2021. See Attachment 7, and summarized also in Attachment 5 at Third Tab, entitled "TR Level Historical Peak."

   (b) Selected Feeder Data. The OSI PI system also captures individual feeder load values and data included in the spreadsheet are the peaks recorded on each individual feeder in the study area. See Attachment 6, and summarized also in Attachment 5 at Second Tab, entitled "Feeder Level Historical Peak."

2. **Determine peak load data from each year and enter this into a spreadsheet.** (This data is shown in Attachment 5, First Tab entitled "Scenic Loop Area Load Growth" at line 25, rows B through I).

3. **Calculate year over year growth as a percentage**. The year over year growth rates have been over 15 percent in some years, and have been slightly negative in other years. (This is shown in Attachment 5, First Tab entitled "Scenic Loop Area Load Growth" at line 26, rows C through I). However, despite the variability from year to year, the overall peak demand has increased from 117,196 kW in 2014 to 181,480 kW in 2021, a total increase of 64,284 kW, or a 54.85 percent increase in demand during that time period. (This is shown in Attachment 5, First Tab entitled "Scenic Loop Area Load Growth" at line 25, comparing rows B and I).

4. **Normalize the data to account for year-to-year variability, resulting in a normalized rate of annual load growth.** Historic normalized load growth from 2014 through 2021 has been approximately 7.84 percent per year. (This is shown in Attachment 5, First Tab entitled "Scenic Loop Area Load Growth" at line 27, rows C through I).

5. **Based on historic load growth, and consideration of known factors and considerations, apply a selected future rate of load growth consistent with historic growth to obtain projected future load demand.** In this situation, with historic load growth of 7.84 percent annually, CPS Energy conservatively selected future load growth rates between 5 percent and 3 percent annually. (This is shown in Attachment 5, First Tab entitled "Scenic Loop Area Load Growth" at line 40, rows B through K). This results in load demand forecasts shown in peak kW demand. (This is shown in Attachment 5, First Tab entitled "Scenic Loop Area Load Growth" at line 39, rows B through K). CPS Energy is forecasting a conservative estimate since the percentage growth forecast is approximately half of the historic normalized growth. As shown in Attachment 5, approximately 4.3 percent normalized load growth is forecasted by CPS Energy over the next ten years (see Attachment 5, First Tab entitled "Scenic Loop Area Load Growth" at line 41, rows B through K).

"CPS Energy followed this methodology in determining the load growth forecasts for this application, resulting in the load demand forecasts shown in the application and testimony, as well as the updated data (namely, including the updated actual data now known for 2020 and 2021) presented to the Commission.

"For Step 5 above, the rates of load growth forecasted are as follows: (a) 5 percent for years 2022 through 2024; (b) 4 percent for years 2025 and 2026; and (c) 3 percent for years 2027 through 2031 (see Attachment 5, First Tab entitled "Scenic Loop Area Load Growth" at line 40, rows B through K). The assumed load growth rates of 5 percent, 4 percent, and 3 percent were subjectively determined in an effort to be conservative but also recognize the historic load growth trend and expected future growth. The historic data also indicates that Fair Oaks Ranch Transformer #1 load is at more than 80 percent of its normal rating since year 2017.

"In conducting the methodology and making the calculations described above, CPS Energy applied certain criteria and made certain assumptions. CPS Energy did not use any specific new developments to forecast new load in the study area. Rather, CPS Energy looked at historic growth rates in the load served by the La Sierra and Fair Oaks Ranch substations. CPS Energy then considered the general known growth occurring and forecasted for the area, including giving consideration to a variety of factors that were considered subjectively to corroborate the growth

projections and not explicitly quantified. These factors included the following criteria identified in CPS Energy's forecasting processes:

Feeder Level Forecasting Criteria:

- Determine normal configuration demand peak and corresponding power factor.
- Gather known information about future residential development.
- Gather known information about future commercial & industrial development.
- Gather known information about existing and future distributed generation.
- Gather known information about existing and future demand response customers.
- Review general conditions of feeder service area.
- Review past feeder historic values.
- Review planned projects for impact to feeder configuration and demands.

Power Transformer Forecasting Criteria:

- Gather demand peak and corresponding power factor for each distribution feeder.
- Review general conditions of transformer service area.
- Review data about existing and future dedicated feeder distributed generation.
- Review past feeder historic values.
- Review planned projects for impact to transformer serving area requirements.
- Develop demand forecast by combining distribution feeder loads (non-coincident).

Substation Forecasting Criteria:

- Gather demand peak and corresponding power factor for each power transformer.
- Review general conditions of substation service area.
- Review past feeder historic values.
- Review planned projects for impact to serving area requirements.
- Adjust actual demands by temperature index relative to 5 year average to get this year's base
- Develop non-coincident demand forecast by combining power transformer demand forecasts.
- Develop non-coincident to coincident factor
- Apply factor to determine coincident demand forecast for transmission planning.

System Level Forecasting

- Gather demand peak and corresponding power factor for each substation.
- Review known information about existing and future demand response customers.
- Review general conditions of system service area.
- Review past feeder historic values.
- Develop demand forecast by combining substation demand forecasts (non-coincident).

"While not all of these criteria are individually documented when the forecasting process is conducted, Attachments 5, 6, and 7 reflect the documentation compiled as a result of applying

the factors above. In considering the factors described above, CPS Energy also considered and applied the following assumptions:

- CPS Energy followed its DP Design Manual 2019 processes for forecasting, including load normalization to reduce annual variation. Actual recorded demands are statistically adjusted by temperature index relative to five year average to find an equivalent base each year.

- Forecasting individual substation growth is based on information known about the area (Large loads, data centers and other customer load growth) and applied to the base demand calculated for each circuit. Variations in the expected demand for individual substation growth is based on information known about the area (Large loads, data centers and other customer load growth) that is applied to the base demand. Erratic growth rates in some years reflect load switching between stations that are outside the study with temporary excess capacity while investments from contractors is expected to fund local distribution system expansion.

- Basing the load forecast from substation and feeder level historical loading data, CPS Energy follows subdivision development, commercial large loads, grid connected distribution generation plants in the study area to support the forecasted peak in the near term (one - two years).

- As described with the original application and subsequent load forecast data, the load growth percentage is greater in the near term i.e., 5 percent for the years 2022 through 2024 and reduced to 4 percent for 2025 and 2026, and then dropped to 3 percent for the future years, 2027-2031 to account for growth uncertainty, but overall a growth value much lower compared to the historical growth trend recorded in the region was used so as to be conservative.

- As discussed in the original filing, CPS Energy has experienced consistent and significant growth in the area over the last seven years, resulting in an approximately 50 percent cumulative increase in load in that time. CPS Energy has also considered the SA Tomorrow forecast from the city and information on the total anticipated residential dwelling units and the amount of square footage of commercial/industrial development from the Comprehensive Plan report that potentially needs to be served out of the circuits with in the Scenic Loop study area. The total additional electrical load reasonably projects to approximately 8-9 MW/year of load growth in the region. Considering the targeted growth scenario projected by SA Tomorrow, by 2040 this additional load equates to approximately 160-180 MW using the Baseline forecast scenario and could be as high as approximately 300 MW using the Targeted forecast scenario. This anecdotal corroborating information supports CPS Energy's staggered growth forecast for the area of 5 percent to 3 percent. As shown in Attachment 5, approximately 4.3 percent normalized load growth is forecasted by CPS Energy over the next ten years (see Attachment 5, First Tab entitled "Scenic Loop Area Load Growth" at line 41, rows B through K). CPS Energy is forecasting a conservative estimate since the percentage growth forecast is approximately half of the historic normalized growth.

"CPS Energy is singly certificated to serve all of the load within the portion of its service territory addressed by the project. There are no other utilities certified to provide service within the need study area.

"The load forecast presented in the CPS Energy application is based on actual historical loads on the system. Potential new development was considered as corroborating anecdotal verification for the load growth projections shown by historic growth trends. Namely, CPS Energy did not consider any specific new load requests, load interconnections, or new developments (other than just "general" load growth in the area) to arrive at the forecasts.

"The information above and presented in the attachments demonstrates the criteria, methodology, and calculations used to develop CPS Energy's load growth forecasts."

George J. Tamez, PE
Affiant

SUBSCRIBED AND SWORN TO BEFORE ME, a Notary Public in and for the State of Texas, this 1 day of December 2021.

NATHALIA ASTRID LOPEZ
Notary Public, State of Texas
Comm. Expires 09-13-2025
Notary ID 131071463

Notary Public

SOAH DOCKET NO. 473-21-0247
PUC DOCKET NO. 51023

APPLICATION OF THE CITY OF SAN ANTONIO TO AMEND ITS CERTIFICATE OF CONVENIENCE AND NECESSITY FOR THE SCENIC LOOP 138 KV TRANSMISSION LINE IN BEXAR COUNTY	**§**	**BEFORE THE PUBLIC UTILITY COMMISSION OF TEXAS**

CPS ENERGY'S SECOND MOTION TO ADMIT
NEED INFORMATION REQUESTED BY COMMISSIONERS

Attachment 2

SA Tomorrow Plan

SA TOMORROW
comprehensive plan

Adopted: AUGUST 11, 2016





CITY OF SAN ANTONIO

Comprehensive Plan

Prepared by:

MIG

In association with:
Economic & Planning Systems, Inc.
WSP | Parsons Brinkerhoff
Ximenes & Associates, Inc.


SA
TOMORROW

Table of Contents

SECTION 1: BACKGROUND AND VISION

SECTION 2: PLAN FRAMEWORK

SECTION 3: PLAN ELEMENTS

SECTION 4: IMPLEMENTATION

APPENDIX: GLOSSARY AND ACRONYMS

SA Tomorrow Acknowledgements

MAYOR
Ivy R. Taylor

CITY COUNCIL
Roberto C. Trevino, District 1
Alan E. Warrick, II, District 2*
Rebecca J. Viagran, District 3*
Rey Saldana, District 4
Shirley Gonzales, District 5
Ray Lopez, District 6
Cris Medina, District 7*
Ron Nirenberg, District 8*
Joe Krier, District 9
Mike Gallagher, District 10

* Comprehensive Planning Committee

CITY MANAGER'S OFFICE
Sheryl Sculley – City Manager
Peter Zanoni – Deputy City Manager
Michael Rodriguez – Executive Assistant

PLANNING COMMISSION
Marcello D. Martinez, Chair
George Peck, Vice Chair
Andrea Rodriguez, Chair Pro Tem
Jody R. Sherrill
Angela Rinehart
Michael Garcia, Jr.
Bradley Carson
Jason Koehne
George McNair

DEPARTMENT OF PLANNING & COMMUNITY DEVELOPMENT
Bridgett White, AICP – Director
Bobbye Hamilton – Assistant to the Director
Rudy Nino, Jr., AICP – Interim Assistant Director & Project Manager
Jacob Floyd, AICP – Planning Coordinator
Micah Diaz – Senior Planner
Brenda V. Martinez – Senior Planner
Ian Benavidez, CNU-A – Planner
John M. Dugan, AICP – Former Director

COMPREHENSIVE PLAN STEERING COMMITTEE
Ron Nirenberg, Tri-Chair
Darryl Byrd, Tri-Chair
Dr. Afamia Elnakat, Tri-Chair
Hazem Rashed-Ali
Stephen Allison
Melissa Byler, P.E.
Janie Canty-Mitchell, PhD, RN, FAAN
James Cunningham
Will Garrett
Debra Guerrero
Karen Guz
George Peck
Sue Ann Pemberton
Angela Rinehart
Jody R. Sherrill
Susan Wright

SPECIAL THANKS
Leilah Powell, Mayor's Office
Walter Ague, District 8
Norbert J. Hart, Deputy City Attorney
Susan Guinn, Assistant City Attorney
Office of Sustainability
Transportation & Capital Improvements Department
VIA Metropolitan Transit
San Antonio Water System
CPS Energy
San Antonio River Authority

COMPREHENSIVE PLAN ADVISORY GROUP

Urban Land Institute
David Adelman

VIA Metropolitan Transit
Jeffrey Arndt

South San Antonio Chamber of Commerce
Al Arreola Jr.

San Antonio Chamber of Commerce
Roger Arriaga

San Antonio Tourism Council
Marco Barros

Bexar County School Boards Coalition
Bobby Blount

San Antonio Mobility Coalition
Victor Boyer

San Antonio Public Library Board of Trustees
Jean Brady

University of Texas Health Science Center
Janie Canty-Mitchell, PhD, RN, FAAN

University of Texas at San Antonio
Albert Carrisalez

San Antonio Hispanic Chamber of Commerce
Ramiro Cavazos

Alamo Regional Mobility Authority
John Clamp

San Antonio Water System
Steven Clouse

SA2020
Molly Cox

Edwards Aquifer Authority
Brock Curry

University Health System
Ted Day

CENTRO San Antonio
Pat DiGiovanni

San Antonio Mobility Coalition
Don Durden P.E., R.P.L.S.

San Antonio Housing Authority
Sara Eaves

Responsible Growth Alliance
Ashley Farrimond

Port San Antonio
Ramon Flores

American Institute of Architects
Angel R. Garcia, AIA

Brooks Development Authority
Leo Gomez

San Antonio Hispanic Chamber of Commerce
Jose Maria Gonzalez

San Antonio Board of Realtors
Gilbert Gonzalez

San Antonio River Authority
Steve Graham

Habitat for Humanity
Natalie Griffith

University Health System
George B. Hernandez, Jr. JD

North San Antonio Chamber of Commerce
Kent Hickingbottom

Union Pacific
Ivan Jaime

Joint Base San Antonio
Felipe Jimenez

Texas Department of Transportation
Mario Jorge, P.E.

San Antonio Parks and Recreation Board
Ray Knox

San Antonio Board of Realtors
Justin Landon

Greater San Antonio Builders Association
Jim Leonard

Bexar County Health Collaborative
Elizabeth Lutz

San Antonio Conservation Society
Bruce MacDougal

Alamo Area Metropolitan Planning Organization
Isidro Martinez

San Antonio Apartment Association
Allyson McKay

CPS Energy
Richard Medina

San Antonio Housing Authority
Richard Milk

City of San Antonio Aviation Department
Frank Miller

San Antonio Apartment Association
Hector Morales

Green Spaces Alliance
Julia Murphy

San Antonio Area Foundation
Dennis E. Noll

San Antonio Medical Foundation
Jim Reed

Greater Bexar County Council of Cities
Chris Riley

Bike Texas
Jack Sanford
Robin Stallings

Mayor's Fitness Council
Jeff Skelton

CPS Energy
George Tamez

San Antonio Youth Commission
Adam Tutor

San Antonio Sports
Mary Ullman Japhet

Texas A&M University-San Antonio
Mario Vazquez

Real Estate Council of San Antonio
Susan Wright

Citizens Environmental Advisory Committee
Erin Zayko

COMMUNITY HEALTH AND WELLNESS PLAN ELEMENT WORKING GROUP

Janie Canty-Mitchell, PhD, RN, FAAN, Chair
Elizabeth Lutz, Vice-Chair
Noah Almanza
Ruben Arciniega
Hannah, Beck
George Block
Terry Burns
Eric Cooper
Matthew Driffill
Laura Esparza
Ashley Farrimond
Trever Gilman
Angela Hartsell
Beth Keel
Alan Montemayor
Dora Peralta
Leslie Provence
Krystin Ramirez
Sonia Rodriguez
Steven Sano
Hannah Santiago
Jeff Skelton
Susan Thompson

Supporting City Departments:
Metropolitan Health District
Solid Waste Management Department

GROWTH AND CITY FORM PLAN ELEMENT WORKING GROUP

Susan Wright, Chair
Steve Patmon, AIA, Vice-Chair
Andres Andujar
Karen Bishop
Stephen Colley, AIA, LEED AP
Phil Crane
Cris Eugster
Gabriel Gonzales
Rene Gonzalez
Lori Hall
Azza Kamal, PhD
Amber Lamm
Michael Lara
Mark Larson
Jaime Lawhn, AIA
Pam Leissner
Lina Luque
Martha Mangum
Debbie McNierney
Richard Medina
Sam Mills, P.E.
Emil Moncivais FAICP,AIA, CNU
Deborah Omolawe
Howard Peak
Brad Peel, AICP
Kim Stoker
Christine Vina, AIA

Stephen Whatley
Stephanie Wiese
Bob Wise, AIA
Clint Wynn
Erin Zayko

Supporting City Department:
Development Services Department

HISTORIC PRESERVATION AND CULTURAL HERITAGE PLAN ELEMENT WORKING GROUP

Sue Ann Pemberton, Chair
James Griffin, Vice-Chair
John Baker
Cherise Bell
Paula Bondurant
Tom Brereton
Antonia Castaneda
Dayna A. Cramer
Cecilia Garcia
Sarah Gould
Michelle R. Krupa
Frederica Kushner
Bianca Maldonado
Marilu Reyna
J.R. "Corky" Rubio
Norma Witherspoon
Barbara Witte-Howell

Supporting City Departments:
Office of Historic Preservation
Office of the City Clerk

HOUSING PLAN ELEMENT WORKING GROUP

Debra Guerrero, Chair
Natalie Griffith, Vice-Chair
Cheri Bass
Kitty L. Brietzke, J.D.
Karina C. Cantu
Christina Castano
Adam Conner
Sara Eaves
J. Antonio Fernandez
James Fischer
Joni Foster
Jose Gonzalez
Xavier Gonzalez, AIA
Mike Hogan
Donna Jones
Jeff Kuwamura
Brad McMurray
Richard Milk
Dennis E. Noll
Jennifer Ramos
Marc Ross
Desiree Serna

Supporting City Departments:
Department of Human Services
Metropolitan Health District

JOBS AND ECONOMIC COMPETITIVENESS PLAN ELEMENT WORKING GROUP

Will Garrett, Chair
Karen Dickson, CEcD, Vice-Chair
Heather Adkins
Margaret Anaglia
Marco Barros
Mack Bennett
Brian Buchanan
Danny Chavez
Adrian Collett
Robert Colunga
Serafina De Los Santos
Brian C. Dillard
Scott Farrimond
Ernest Gerlach
Lorenzo Gomez III
Melissa Gray
Christopher Herring
David Holmes
Trey Jacobson
Marcel Johnson
Rob Killen
Tom Long
Aiyana J. Longoria
Adrian Lopez
Rosemary Melody
Jim Perschbach

Sha-Rone Caffie-Reyes
David Shelledy, PhD
Adam Tutor
Renee Watson, BBA, MPA, MCCA
Federico Zaragoza

Supporting City Departments:
Economic Development Department
San Antonio Public Library

MILITARY PLAN ELEMENT WORKING GROUP

James Cunningham, Chair
Byron C. Hepburn, M.D., Vice-Chair
Joseph Hart
Bill Hill
Felipe Jimenez
Sheryl Johnson
Deborah Kendall-Gallagher, J.D., PhD
Tracy Manning
Michael Moore
Hector Morales
Sheli Lawson
Dick Nevell
Marcus Peoples
David E. Petersen
Meg Reyes
Rob Rodriguez
Mike Rust
Gail Siller
Susan Thompson

Supporting City Department:
Office of Military Affairs

NATURAL RESOURCES AND ENVIRONMENTAL SUSTAINABILITY PLAN ELEMENT WORKING GROUP

Karen Guz, Chair
Sara Beesley, Vice-Chair
Gavin Nichols
Annalisa Peace
Noah Almanza
Rene Perez
Philip Bedford
Francine Romero
Scott Bible
Pauline A. Rubio
Karen Bishop
Thursten Simonsen, PE
Steven Clouse
Karen Weehler
Trey Dawson
Brenda Williams
Brent Doty
Scott Halty
Greg Hammer
Maggie Hernandez
Bryan H. Hummel
Nicholas Jones
June Kachtik
Hector Martinez
Alan Montemayor

Supporting City Departments:
Office of Sustainability
Metropolitan Health District
Parks and Recreation Department

PUBLIC FACILITIES AND COMMUNITY SAFETY PLAN ELEMENT WORKING GROUP

Hazem Rashed-Ali, Ph.D, Chair
Yvonne Rivera, Vice-Chair
Don Adams
Christina Aronhalt
Tremell Brown
Tanisha Fuller-Felix
Santiago Jaramillo
Alberto Jorge
Gayle Knight
Anita Ledbetter
Mark Ledford
Juanita Pineda, DDS
Maggie Thompson

Supporting City Departments:
San Antonio Fire Department
Department of Human Services
Metropolitan Health District
Pre-K 4 San Antonio

TRANSPORTATION AND CONNECTIVITY PLAN ELEMENT WORKING GROUP

Melissa Byler, P.E., Chair
Laura Morales, Vice-Chair
Jim Reed
Jason Rodriguez
Nolan Anderson
Jack Sanford
Jeffrey Arndt
Darcie Schipull
Roger Arriaga

Dave Wegman P.E., CFM
Jonathan Bean
James Williams
Joseph Black
Jeremy Wyndham, P.E.
Victor Boyer
Lester Bryant
Moises Cruz
Don Durden P.E., R.P.L.S.
Angel R. Garcia, AIA
Jesse Garcia, P.E.
Jeanne Geiger
Robert G. Hanley, AIA
Mark Hurley
Ivan Jaime
John C. McCarthy
Barbara McMillin
Marques Mitchell
William A. Myers

Supporting City Departments:
Transportation & Capital Improvements Department
Aviation Department,
Metropolitan Health District
Office of Sustainability

CITIZEN'S PLANNING INSTITUTE

Bill Bailey
Jennifer Ramos
Hannah Beck
Oscar Rosalez
Ken Brown
Klaus Schonfeld
Andy Castillo
Lauren Sides
Dominick Dina
Donalda Smith
Lorenzo Gomez
Mark Tirpak
Xavier Gonzalez, AIA
Kay Turner
Amy Hardberger
Felix Ziga
David Komet
Sylvia Mendez
Paul Miller
Gilbert Morales
Brad Parscale

CONSULTANT PROJECT TEAM

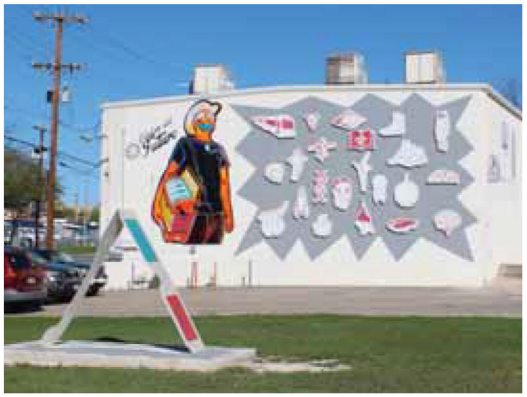
MIG, Inc.
Mukul Malhotra, Principal
Jay R. Renkens, Principal
Chris Ryerson, Project Manager
Nicole Hofert
Chase Mullen
Elly Brophy
Joyce Vollmer
Noe Noyola
Mark Sillings
Beth Martin
JulieAnn Murphy
Amalia Leighton
Jose Rodriguez
Diana Gonzalez
Cole Gehler
Mark De La Torre

Economic & Planning Systems, Inc.
Andrew Knudtsen, Principal
Matt Prosser, Vice President

WSP I Parsons Brinkerhoff
Kerri M. Collins, Vice President
Derek Mueller

Ximenes & Associates, Inc.
Linda Ximenes
Sonia Jimenez


CASTLES



SECTION 1

Background and Vision

Chapter 1: Introduction

San Antonio is planning boldly. We're tackling the tough issues and making the hard choices because "business as usual" isn't good enough. We're planning now to ensure that the great City of San Antonio captures the type of growth and economic development that is compatible with our community's vision of the future and provides benefits to all our current and future residents.

In 2014, our community embarked on the momentous effort of developing a modern Comprehensive Plan for our city. Comprehensive planning is a coordinated community-based process that will help us achieve the goals that are important to our residents. It promotes sound development, as well as public health, safety and welfare.

Chapter 213 of the Texas Local Government Code enables a municipality to adopt a comprehensive plan for the long-range development of a municipality. A comprehensive plan may include, but does not have to be limited to, provisions on land use, transportation and public facilities. Comprehensive plans often consist of a single plan or a coordinated set of plans and may be used to coordinate and guide the establishment of development regulations. In light of this, a municipality must develop standards for determining the consistency required between a plan and development regulations.

The city's current comprehensive plan is the 1997 Master Plan Policies. It is important to review and update comprehensive plans periodically in order to meet the changing goals and needs of a community. Any future update will include resident and stakeholder input as the Comprehensive Plan is a community-based plan. The primary objective in undertaking the current Comprehensive Plan was to engage the community in the refinement and implementation of our vision for growth and development in San Antonio that was established by the SA2020 process.

The SA2020 vision originated with a series of public forums in 2010 to develop goals for improving San Antonio by the year 2020. Thousands of San Antonians participated in the visioning process, which culminated in a detailed report, released in 2011, that outlined a bold strategic vision for San Antonio's future.

Our vision reflects the community's desire to support economic development and new jobs while fostering community arts, education, health and culture. SA Tomorrow is the city's innovative, three-pronged planning effort established to implement the SA2020 vision through 2020 and beyond, and includes three concurrent and complementary plans: the updated Comprehensive Plan, a Sustainability Plan, and a Multimodal Transportation Plan. These plans all work in concert to guide the city toward smart, sustainable growth.

Why Plan Now?

Projected growth for Bexar County is expected to add up to 1.1 million new residents, with 500,000 new jobs, and 500,000 new dwelling units by 2040. We need to update the city's Comprehensive Plan to prepare our community for this anticipated population and employment growth, and to help us understand what that growth will look like and how it will affect our daily lives. With a relatively fixed area available for future development, the anticipated population and employment growth will certainly have an impact on our community's overall quality of life and livability. We also have to ask ourselves if it's now time to expand our boundaries or focus on development within the city's existing footprint.

To be successful and truly address the long-term issues facing San Antonio, the Comprehensive Plan has to tackle those difficult questions that arise from an honest assessment of our community's challenges and clearly state the hard choices we must make to achieve the community's vision for the future. Many of these hard choices are rooted in the fact that a "business as usual" approach is beginning to result in systems and patterns that are unsustainable or that produce results counter to our community's stated vision and goals. Reversing decades-old habits and changing entrenched systems is difficult. The uncertainty and complexity associated with planning for the next 25 years is daunting.

If San Antonio continues to develop along recent trends and using existing development patterns, our quality of life will decrease significantly over time leading to increases in cost of living, commute times and congestion levels.

Perhaps the most important task tackled by our community in crafting this Comprehensive Plan was determining where growth should be directed and encouraged, and doing so in a way that protects vital historic, cultural, social and natural resources. By engaging an array of community stakeholders, jurisdictions and communities, the planning process has allowed us to articulate where growth should be encouraged and where it should be discouraged. With these areas identified, we can deploy policies and regulatory techniques that encourage development in the desired areas. Such efforts are predicated on a new way of thinking about growth that requires significant cooperation and coordination between different jurisdictions, utilities and other members of the community at a citywide and regional level.

If guided properly, the influx of new residents and jobs will enhance our city and all our residents. Planning now will allow us to direct growth consistent with the community's vision and our goals for the future. The goals of the Comprehensive Plan effort are to:

- Update the 1997 Master Plan Policies;
- Re-affirm the community's vision for the future;
- Implement and expand on the SA2020 vision for the built environment;
- Articulate the form of future physical growth;
- Accommodate and distribute projected population growth;
- Guide strategic decision making;
- Guide infrastructure investments and incentives;
- Reconcile existing plans, policies, and assumptions; and
- Update the city's current comprehensive planning program.

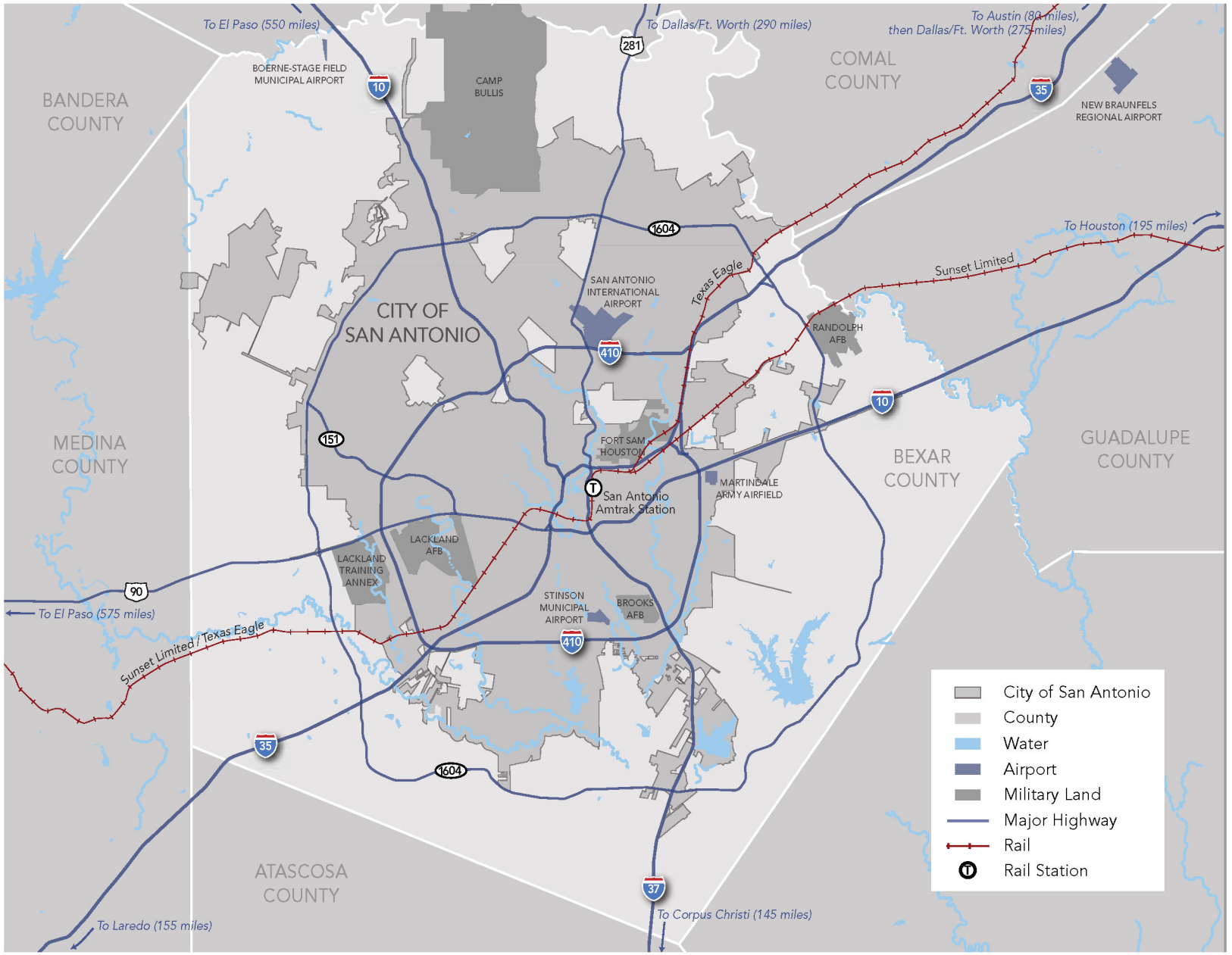
Planning Area

The planning area for SA Tomorrow is the corporate limits of the City of San Antonio and its extraterritorial jurisdiction (ETJ) in unincorporated Bexar County. When implemented, the plan will also affect and inform planning with the Alamo Area Metropolitan Planning Organization (AAMPO) and other regional agencies. While the Comprehensive Plan is an umbrella policy and planning document with citywide implications, it does not alter or negate our existing neighborhood plans, community plans, sector plans or any other land use plans.

Rather, the Comprehensive Plan and the larger SA Tomorrow effort provide an overarching planning framework, big picture direction and the tools necessary for our residents to create, coordinate, update and implement plans and strategies for regional centers, corridors, and neighborhoods, along with many other existing and future places throughout the city.

What is a Comprehensive Plan?

A comprehensive plan is an official, long range planning document that provides strategic direction for decision making and community investment. San Antonio's comprehensive planning effort was developed with support and collaboration from our city's residents, local organizations, the Department of Planning & Community Development (DPCD) and other city entities. The purpose of this plan is to unify the visions, goals, and policies of San Antonio's other plans and initiatives and identify specific issues, challenges and needs. It presents preliminary concepts, strategies, and recommendations for various elements of the community.


To El Paso (550 miles)
To Dallas/Ft. Worth (290 miles)
To Austin (80 miles), then Dallas/Ft. Worth (275 miles)
BANDERA COUNTY
BOERNE-STAGE FIELD MUNICIPAL AIRPORT
CAMP BULLIS
COMAL COUNTY
NEW BRAUNFELS REGIONAL AIRPORT
To Houston (195 miles)
Sunset Limited
Texas Eagle
SAN ANTONIO INTERNATIONAL AIRPORT
CITY OF SAN ANTONIO
RANDOLPH AFB
MEDINA COUNTY
FORT SAM HOUSTON
BEXAR COUNTY
GUADALUPE COUNTY
San Antonio Amtrak Station
MARTINDALE ARMY AIRFIELD
LACKLAND AFB
LACKLAND TRAINING ANNEX
STINSON MUNICIPAL AIRPORT
BROOKS AFB
To El Paso (575 miles)
Sunset Limited / Texas Eagle
ATASCOSA COUNTY
To Laredo (155 miles)
To Corpus Christi (145 miles)
City of San Antonio
County
Water
Airport
Military Land
Major Highway
Rail
Rail Station
0
2.5
5
10 Miles
N

Plan Area

Plan Background

A variety of previous and concurrent efforts were critical inputs to the Comprehensive Plan process. Several of those efforts are highlighted below.

1997 MASTER PLAN POLICIES

The previous umbrella document is the San Antonio Master Plan Policies, adopted May 29, 1997. These policies provided guidance in the evaluation of future decisions on land use, infrastructure improvements, transportation and other issues, setting broad, long-range goals for San Antonio. The 1997 Master Plan Policies have been largely implemented through more detailed levels of planning by means of other citywide functional plans, sector plans, neighborhood and community plans and community development plans.

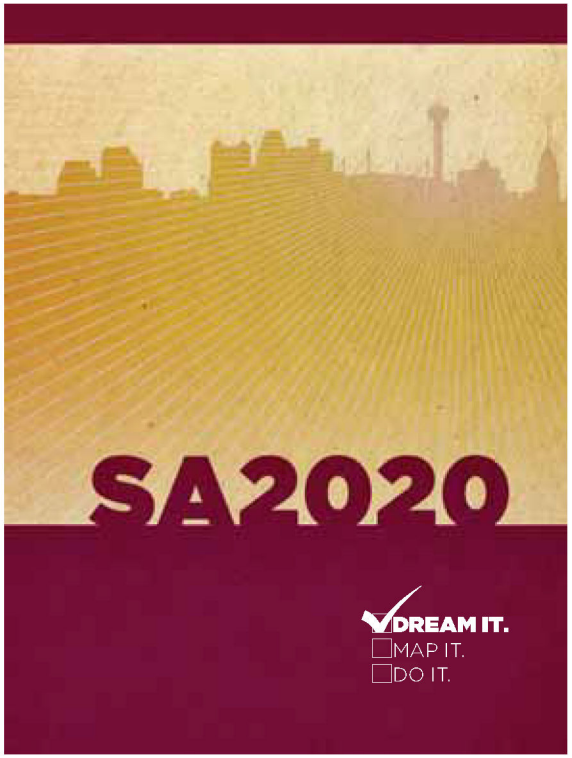
SA2020

The SA2020 process was a community-wide visioning effort guided by a steering committee of community leaders and representatives. The Steering Committee consisted of three Tri-Chairs and 22 respected members of the community, representing the public, private and nonprofit sectors. The Steering Committee drew from the diversity of San Antonio, including a broad range of interests and areas of expertise. The process was supported by the City of San Antonio and the Office of the Mayor, whose staff was responsible for meeting logistics, publicity and coordination.

The SA2020 process began with a Vision Scan to honor and build upon past community visioning efforts, including both broad-based visions and targeted vision statements from various community sectors. The Vision Scan process identified common themes and values, and provided the foundation of a structural framework for the SA2020 process, which is organized into 11 areas:

- Arts & Culture;
- Community Safety;
- Downtown Development;
- Economic Competitiveness;
- Education;
- Family Well-Being;
- Government Accountability & Civic Engagement;
- Health & Fitness;
- Natural Resources & Environmental Sustainability;
- Neighborhoods & Growth Management; and
- Transportation.

SA2020 resulted in an overarching vision for our community, as well as more detailed visions, targets and strategies for each of the 11 areas. SA2020 provides a significant foundation for the Comprehensive Plan and the larger SA Tomorrow efforts.



COMPREHENSIVE PLAN INITIAL STUDIES

The city completed several technical studies before initiating the more formal SA Tomorrow effort. These studies provided a baseline understanding of how San Antonio fares in terms of capacity, land buildout and costs associated with different growth scenarios and community goals. The three major components to the initial studies are summarized below.

Component 1: Land and Development Capacity Study

This study assessed the land and infrastructure capacity necessary to accommodate additional employment and housing development within the existing city limits and the city's extraterritorial jurisdiction (ETJ). The study found a lack of residentially-zoned land to accommodate the forecasted demand for housing in several portions of the city. There isn't enough land to capture housing development, particularly within the north part of the city—if development continues under the same density and development patterns. Increasing the density of neighborhoods and the average density of single-family development will help reduce some of the demand for land. Additionally, there is an oversupply of land in underutilized commercial- and industrial-zoned parcels. Areas with large concentrations of vacant and underutilized commercial and industrial-zoned parcels can be repositioned as residentially-focused, mixed-use neighborhoods that will increase the supply of residential land in these inner subareas.

The analysis of housing preferences and existing housing conditions indicated there is unmet demand for walkable neighborhoods, based on existing conditions and consumer preferences. San Antonio lacks walkable neighborhoods. Despite limited newly constructed single-family development projects that have a more walkable design, local demand exists for more walkable development. The recent inner city development and the strength of the city's historic neighborhoods—which, on average, are more walkable than the rest of San Antonio—are indicative of this demand.

San Antonio has reached the limits of unconstrained outward growth due to land availability, high cost and difficulty of developing infrastructure and utility service. There is land capacity within the county to accommodate the growth forecasted by 2040; however, it will likely require investment in currently under performing parts of the city and development at slightly higher densities in targeted locations.

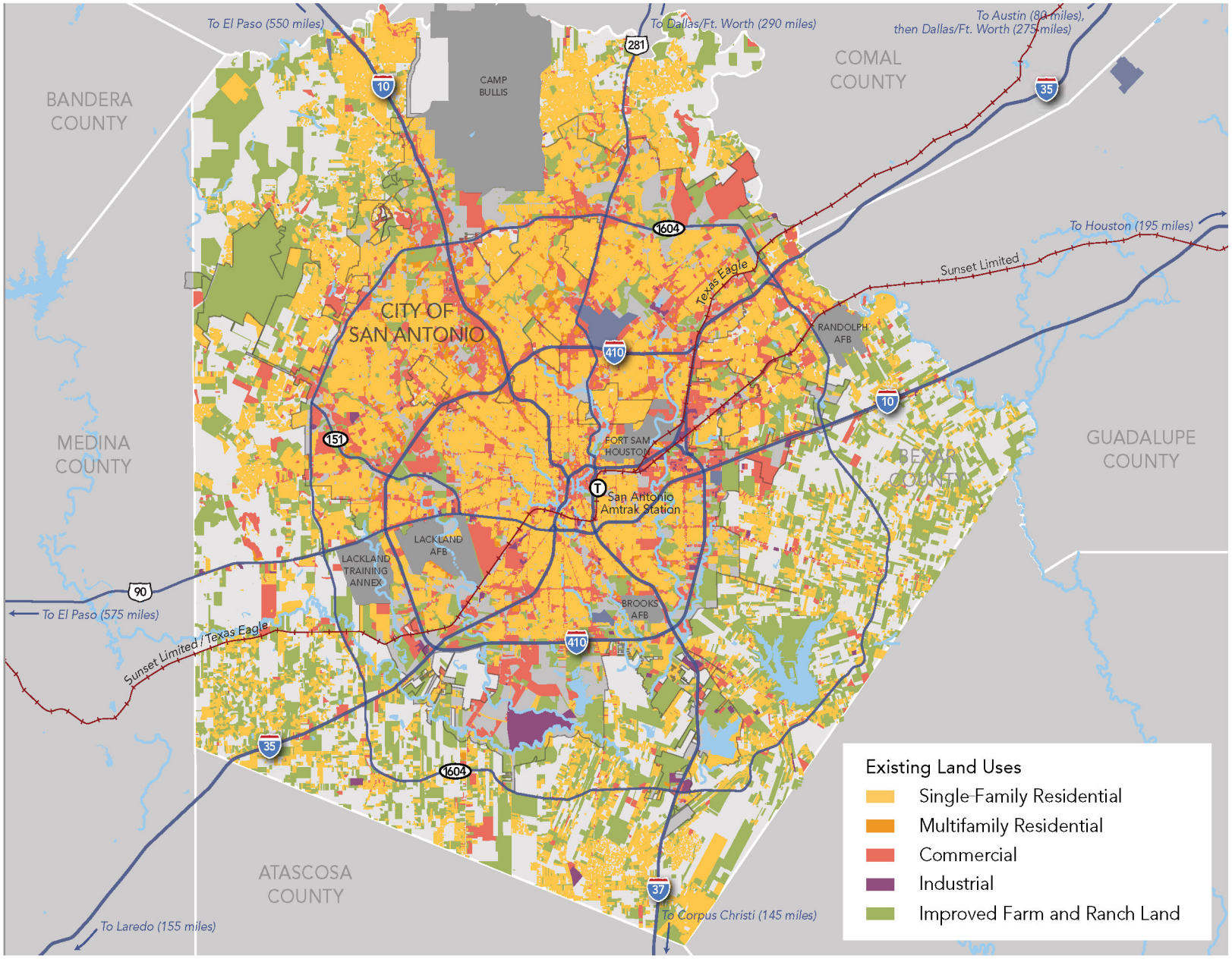
Component 2: Future Jobs, Economic Opportunity and Housing Study

This study analyzed the demand for jobs and housing over the next 25 years and the impact of forecasted demand on development patterns and geographic locations. Employment in San Antonio has a polycentric geographic pattern, with clusters of employment dispersed throughout the city. This reflects the dispersed nature of the major economic drivers of the city's economy (military, healthcare, education and tourism). There are currently inadequate land use controls or incentives, and a lack of appropriate master plans to guide and attract employment growth. This has made it difficult for the city to leverage these assets to their full potential.

However, jobs within the city have somewhat organically concentrated into 13 centers or nodes, largely along major transportation routes. This configuration offers an opportunity to align economic development efforts with land use planning and infrastructure investment. Focusing economic development within these centers will help transform these areas from employment centers to true mixed-use activity centers.

Component 3: Fiscal Impact of Alternative Growth Scenarios

This fiscal analysis had two main findings regarding new development. First, infill development was found to have a lower cost (infrastructure, services, etc.) to the city relative to potential tax revenues than greenfield development (in vacant areas). Second, the density of a development is key. The potential costs and benefits of five existing development patterns were also assessed. The denser programs tested had the greatest revenue relative to costs for the city. Bexar County also recently analyzed the fiscal impact of development. The County found that it is not equipped to provide an adequate level of urban services due to limitations in its revenue generation and service provision tools provided by the State, which will ultimately create a burden for the city.



Existing Land Uses

The Multimodal Transportation Plan includes policies, strategies and projects intended to promote a more balanced transportation system.

The Sustainability Plan includes recommendations in seven focus areas addressing environmental sustainability, economic resiliency and social equity.

SA TOMORROW PLANS

To achieve our community's vision as expressed and tracked by SA2020, the city launched a robust, three-pronged planning effort: SA Tomorrow. SA Tomorrow encompasses this Comprehensive Plan, as well as a Multimodal Transportation Plan and a Sustainability Plan. All of these efforts focused on addressing the challenges and opportunities associated with adding over one million people to our region by 2040.

Multimodal Transportation Plan

The city worked with stakeholders, partner agencies and the larger community to develop a Multimodal Transportation Plan that builds upon and operationalizes Comprehensive Plan goals and policies, incorporates all modes of transportation and recommends a sustainable, safe and efficient transportation system that can support the new residents, housing and jobs anticipated for our community over the coming decades.

Its recommendations are consistent with the Comprehensive Plan's vision for the city's transportation system. It communicates the city's transportation strategy for the future, proposes improvements that address all modes and provides methods for prioritizing projects.

Sustainability Plan

The community and stakeholders described a sustainable San Antonio as an inclusive and fair community with a thriving economy and a healthy environment. The Sustainability Plan highlights seven focus areas and five cross-cutting themes. Each focus area has its own vision, outcomes, strategies and measures of success. The cross-cutting themes—identified by reviewing past surveys, current plans and policies and public input—identify and highlight key priorities. These priorities create the framework on which every identified strategy was evaluated to ensure that upon implementation, the state of these priority areas is improved or, at a minimum, not negatively impacted. Additionally, these cross-cutting themes have been considered and integrated into each of the major components and elements of the Comprehensive Plan and the Transportation Plan.

VIA'S VISION 2040

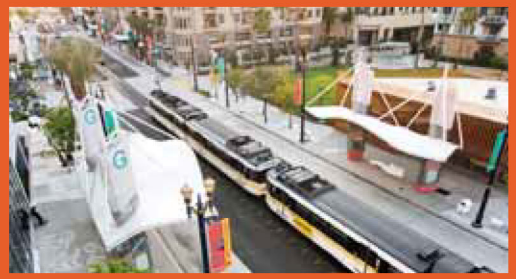
Vision 2040 is a community-driven process to update VIA Metropolitan Transit's Long Range Comprehensive Transportation Plan through the year 2040. Through its planning process, VIA customers and stakeholders, along with residents in the larger San Antonio region, have helped develop our region's vision for the future of public transportation. VIA's Vision 2040 planning process occurred alongside SA Tomorrow and other significant planning efforts by the City of San Antonio, Lone Star Regional Rail and Alamo Area Metropolitan Planning Organization. Developing these multiple plans together ensures unprecedented synergies across all efforts for our city and region.

Vision 2040 identifies a range of transit solutions to serve our region's busiest and most vibrant areas of activity, employment and housing. The plan will present various modes of transportation, and develop system alternatives to understand how transit could affect our region. By engaging the community, Vision 2040 will work to evaluate all alternatives and identify a preferred system plan that meets the transit needs of today and tomorrow. The preferred system plan could result in a mix of high-capacity transit, express bus, skip-stop, circulator and local bus services.

Based upon community input, VIA's Vision 2040 plans for the future of transit connectivity in San Antonio over the next 25 years includes a substantial expansion of the existing Primo bus service and enhanced premium and express service.

What's the Link Between Density and Transit?

Collaborative efforts between the city and VIA will align major land use and transportation initiatives in San Antonio for decades to come. Our Comprehensive Plan calls for projected growth to be captured primarily in regional centers, urban centers, and key multimodal corridors. These focused areas of greater residential and job concentration benefit from more dynamic and connected mobility opportunities. VIA's Vision 2040 Long Range Plans seeks to enhance our transit network with high-capacity and high-frequency options that operate most effectively when connecting high-density stops and stations. Ongoing strategic coordination must ensure that VIA's expanding network overlaps and connects with our existing and emerging mixed-use and activity hubs.



Plan Process and Engagement

The planning process for the Comprehensive Plan began in Fall of 2014 and extended over a year and a half. A variety of opportunities were offered for key partners, stakeholders and the larger community to provide input and feedback. Four major phases of the planning effort were supported with stakeholder interviews, Plan Element Working Groups, neighborhood workshops, public meetings and other outreach efforts. The following provides an overview of the planning phases and timeline, as well as several key sources of the community input that informed and inspired the contents of this document.

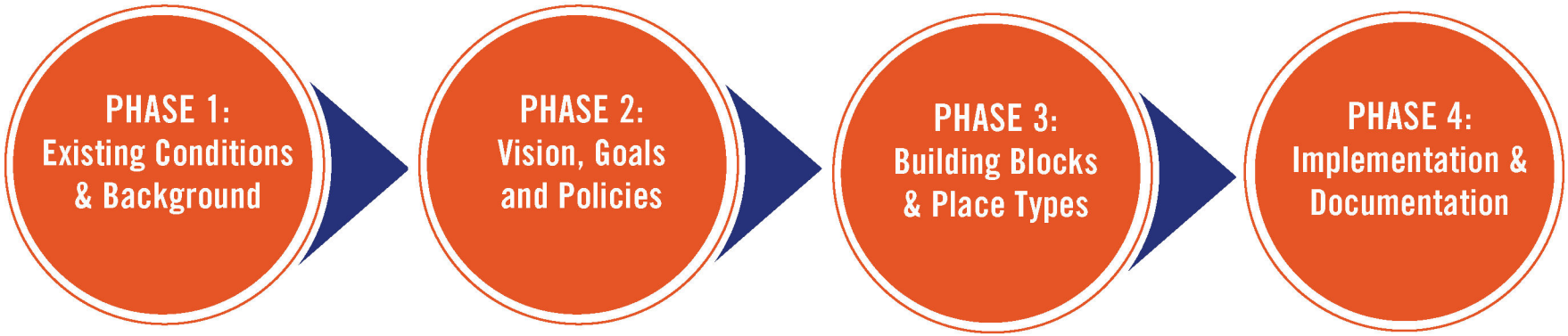
PHASES AND TIMELINE

Building on the Comprehensive Plan Initial Studies, the first phase of the process focused on the development of the Existing Conditions Technical Background Report. That report presents data and summaries of document and plan reviews for each of the nine content-specific elements of the Comprehensive Plan.

With the Existing Conditions Technical Background Report complete, the process shifted toward policy analysis and the development of goals and policies. The existing conditions report, the subsequent policy analysis and several rounds of working group revisions informed a framework of goals and policies for each plan element.

In the third phase of the process, plan element goals and policies were further refined in conjunction with a concurrent process of identifying and developing place types that will help guide and shape growth, redevelopment, and preservation in neighborhoods, regional centers, and major corridors throughout the city. In the end, the goals and policies reflect and support our community's vision and the key guiding principles that characterize the city's ambitions for the next 25 years.

The final phase of the process was to draft a new Comprehensive Plan specific to San Antonio that will be adopted by the City Council. Throughout the process, there was ongoing community involvement and stakeholder input that is woven into the final plan.



COMPREHENSIVE PLAN COMMITTEE

The SA Tomorrow Comprehensive Plan Committee (CPC) is a subcommittee of City Council that provided high level direction to staff and the larger planning efforts throughout the planning process.

COMPREHENSIVE PLAN ADVISORY GROUP

The Comprehensive Plan Advisory Group (CPAG) is a collection of leaders from over 65 community partner organizations and agencies. The CPAG met on several occasions during the planning process to review draft materials and identify creative ways for community organizations to engage in the planning process and partner in implementation of the Comprehensive Plan. The CPAG membership nominated members of their organizations to participate in the Plan Element Working Groups described below.

STEERING COMMITTEE

The overall SA Tomorrow process was guided by a Steering Committee composed of three Tri-Chairs, the chair or co-chairs of each of the nine Plan Element Working Groups, three Planning Commissioners, and a representative from VIA. The Steering Committee provided guidance for the tone and direction of the plan, how best to respond to and incorporate community input and feedback, and the continued coordination of the Comprehensive Plan, Multimodal Transportation Plan and Sustainability Plan efforts. The Steering Committee also provided critical direction on the overall Implementation Strategy and specific aspects of the indicators, targets and actions associated with each plan element.

PLAN ELEMENT WORKING GROUPS

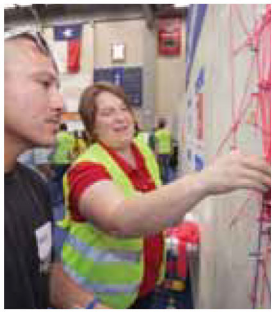
Each of the nine plan elements of the City of San Antonio's Comprehensive Plan was guided by a Plan Element Working Group (PEWG) composed of community leaders and representatives of relevant city departments, partner organizations, utilities, colleges and universities, neighborhoods and advocacy groups. Each PEWG included between 15 and 30 members who met a minimum of eight times throughout the planning process. The issues, goals, policies and implementation strategies specific to each plan element were largely developed through the individual and collective work of the PEWGs.

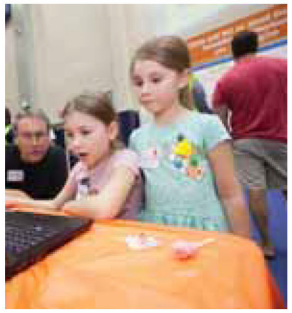
NEIGHBORHOOD ENGAGEMENT

Our neighborhoods are the bedrock of the San Antonio community. A series of neighborhood outreach activities and workshops was a critical element of the overall community awareness and engagement strategy of the Comprehensive Plan. The city held a series of community workshops at various locations at several key milestones. Neighborhood workshops were instrumental in the development and refinement of place types, regional centers, corridors and neighborhood preservation and enhancement strategies.

COMMUNITY OUTREACH

Broader community outreach included a variety of activities ranging from stakeholder interviews and focus groups to large community events and from surveys to a variety of web-based activities and social media. A large SA Tomorrow kick-off event linked the Comprehensive Plan effort to concurrent planning for the Multimodal Transportation Plan, Sustainability Plan, SA2020 and VIA's Vision 2040 Plan Update. Stakeholder interviews, focus groups and surveys were used to take a deeper dive into issues and opportunities related to housing, mixed-use development, regulatory hurdles and incentives, new policy direction and the future of existing and future regional centers. A website was developed for the larger SA Tomorrow effort with an interactive section devoted to the Comprehensive Plan. Twitter, Facebook and Instagram were used extensively throughout the planning process to promote events and drive participants to surveys and the website for more information and opportunities to get involved.





Plan Organization

The Comprehensive Plan is organized into four major sections. Each section contains multiple chapters. The purpose of each major plan section is summarized below.

SECTION 1: BACKGROUND AND VISION

The first section provides an orientation to the purpose, structure and foundation of the Comprehensive Plan. This section includes a plan introduction, an overview of assets, challenges and opportunities, and the vision framework. The vision framework includes the updated vision for the San Antonio of 2040, a set of guiding principles and the cross-cutting themes that guide the entire SA Tomorrow effort.

SECTION 2: PLAN FRAMEWORK

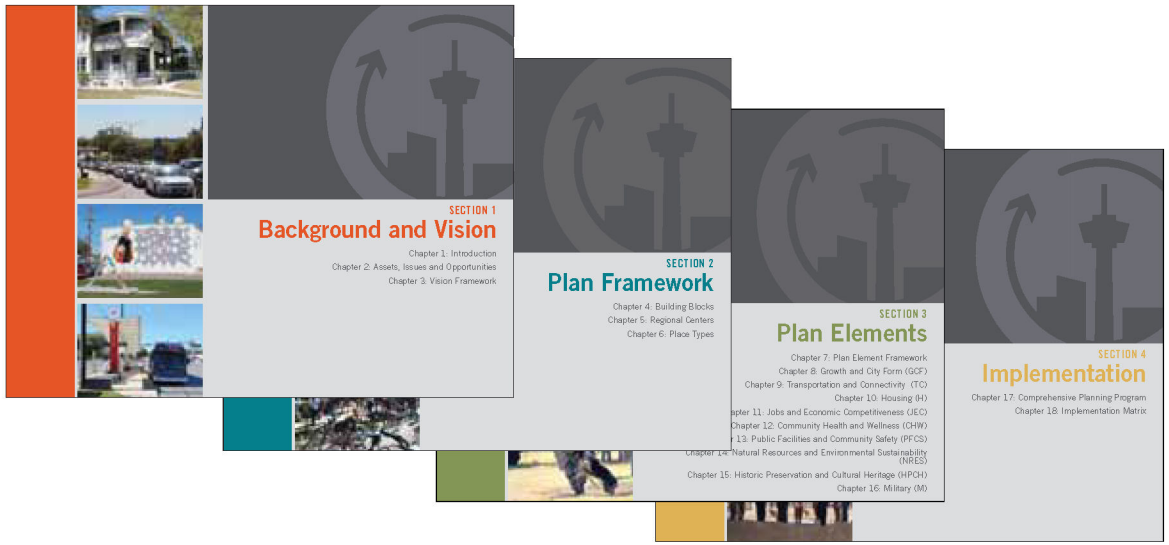
The second section of the plan provides the overarching framework for the physical form of San Antonio. The Building Blocks chapter outlines how regional centers, corridors and neighborhoods work in concert to create the San Antonio we envision over the coming decades. The overview of 12 place types shows how they build upon and protect existing and future community assets by creating places that are livable, inclusive and sustainable. A final chapter in the section provides guidance on the application of place types throughout our community.

SECTION 3: PLAN ELEMENTS

Section 3 of the Comprehensive Plan dives into the individual plan element topic areas. After the presentation of an overarching plan element framework, the section devotes a chapter to each of the nine Plan elements shown on page 1.15. Each chapter includes an overview of major issues and challenges specific to each element with a set of goals and policies to set the direction for how our community will respond to or address the challenges before us.

SECTION 4: IMPLEMENTATION

The final section of the Comprehensive Plan focuses on implementation. It includes an overarching Implementation Strategy that is built on an updated approach to the Comprehensive Planning Program for the city. The section then provides detailed indicators, targets and actions that are overarching and specific to each plan element.



Growth and City Form

Transportation and Connectivity

Housing

Jobs and Economic Competitiveness

Community Health and Wellness

Public Facilities and Community Safety

Natural Resources and Environmental Sustainability

Historic Preservation and Cultural Heritage

Military

Chapter 2: Assets, Issues and Opportunities

The City of San Antonio has many assets that make it a desirable place to live and a place that is estimated to capture a significant number of new residents and employees over the coming decades. These assets serve as the basis for future opportunities.

However, changes in demographic trends, land supply, development patterns and other factors have generated challenges that the city must address to develop sustainably, to be economically competitive and to retain a high quality of life for our residents. The city's assets, challenges and opportunities are summarized throughout this chapter and supplemented with plan element specific strengths and weaknesses in Section 3.

Assets and Opportunities

The underlying assets, opportunities and challenges that this plan must address are driven by the forecast for new growth for the city and region. San Antonio, with a total population of 1.44 million (2014 US Census), is the seventh largest city in the nation. The City of San Antonio surpassed Dallas in the early 2000s to become the second largest city in Texas. Both San Antonio and Bexar County have experienced strong population and employment growth over the past decade. These trends are expected to continue as an additional 1.1 million people and over half a million jobs and households are forecast by the Alamo Area Council of Governments for Bexar County between 2010 and 2040. This amount of growth would represent a 65% increase in the population in Bexar County, much of which has the potential to be within San Antonio city limits.

The forecasted amount of growth represents significant opportunity for our community. The city will have a range of demand for housing types from a growing diversity of residents. This growth will generate a variety of new jobs needing varying sites and buildings in which to locate. Aligning the land use plan for San Antonio to match market demand and consumer and employer preferences will allow the city to provide more housing choice, generate additional economic opportunity, and help address issues such as affordable housing, income/economic segregation and health goals and objectives.

The Eagle Ford Shale formation has stimulated the economy and generated new development of jobs, housing, goods and services.

EMPLOYMENT AND ECONOMY

San Antonio is home to primary employment centers and economic engines in the greater San Antonio-New Braunfels Metropolitan Statistical Area. Our core economic assets are the major drivers for our four traditional industries (tourism/hospitality, healthcare, education, and military). We also have other major economic assets, both long standing and emerging, that provide us with a diversity of opportunities for future economic growth.

San Antonio is also an attractive place to do business. The business-friendly and low-tax environment in Texas appeals to many companies considering locating here. Also adding to the appeal are the city's municipally-owned utilities (CPS Energy and San Antonio Water System), which provide affordable energy and water and the ability to innovate their approach to long-term service.

Over the past ten to fifteen years, San Antonio's economy has grown steadily and is predicted to continue this course. This economic growth will drive demand for housing and hopefully improve opportunities for existing residents. With a polycentric economic geography and multiple large concentrations of employment throughout the city, living near work is easier for many residents.

Yet this polycentric employment pattern can pose problems such as establishing a coordinated approach to job growth and connecting residents to jobs through multiple modes of transportation. Continued growth in these centers of employment and housing will help keep travel distances and commute times lower for residents and provide potential opportunities for better multimodal connectivity.

San Antonio's geographic location is also an asset to our economy and makes us an attractive place to live. Proximity to the Eagle Ford Shale formation and the fracking of natural gas is a major asset to our city. The primary active area for drilling is along I-37 between San Antonio and Corpus Christi has made San Antonio a major hub for business, services, goods and housing needed to support the drilling activities in the Eagle Ford. Additionally, our city's location near major sea ports in Houston and Corpus Christi and major interstates is also significant. Connectivity to those ports via roadway and rail makes San Antonio a competitive logistics location facilitating national and international trade. San Antonio's close proximity to Austin, also experiencing significant growth, provides an opportunity for a coordinated approach that may generate larger opportunities for growth in the Central Texas region.

SeaWorld San Antonio and historic assets like the King William Historic Neighborhood are destinations for residents and visitors alike.

TOURISM

San Antonio is a major tourist destination in the U.S. and hosts more than 31 million visitors annually, 24.9 million of which come for leisure activities. Anchored by its unique history and culture, San Antonio is home to the Alamo, River Walk and other major attractions such as SeaWorld San Antonio, Six Flags Fiesta Texas, the Henry B. Gonzalez Convention Center, the Museum and Mission reaches on the River Walk, the Tobin Center for the Performing Arts and the Pearl Brewery development. Our San Antonio Missions are a National Historical Park and were recently named a World Heritage Site by the United Nations Education, Scientific and Cultural Organization (UNESCO).

QUALITY OF LIFE

Another significant asset to our community is our high quality of life. Our below-national-average cost of living and home prices and our strong economic growth, relatively short average commute times make our city appealing to new residents. In addition, San Antonio's strong cultural heritage gives us a unique sense of place.

Our historic neighborhoods are another example of how our heritage impacts housing and neighborhoods. The demographic makeup of the San Antonio's 27 historic districts is largely reflective of the city as a whole. The historic districts are some of the most desirable neighborhoods in the city. A study commissioned by the city's Office of Historic Preservation in early 2015 found that the property values in the historic districts have increased over the past 15 years more than the city as a whole. The historic districts have many of the characteristics of neighborhood types that are in demand nationally, including walkability (all the historic districts have a higher Walk Score than the citywide average), a greater mixture of uses and even shorter commute times to work.

DEVELOPMENT OPPORTUNITIES

Our community has remarkable opportunities for infill development in the urban core. The Comprehensive Plan Initial Studies found that there are a large number of vacant and underutilized parcels within the inner core of the city (inside Loop 410) that are zoned commercial and industrial. Allowing for these commercial and industrial-zoned areas to redevelop with a wider mix of uses and introducing housing can help revitalize these areas and improve the surrounding existing neighborhoods.

GROWING MOMENTUM

Our city has a number of large, transformational development projects—important sites that have the potential to change the prevailing direction of growth within our city. Four of these transformational development sites include Hemisfair, Brooks City Base, Port San Antonio and the Texas A&M University-San Antonio campus and associated development. The future development, or redevelopment, of these sites has the potential to catalyze development in portions of the city where recent growth has been relatively limited. More significantly, these sites are located in areas where an ample supply of developable land exists. The large size, limited number of owners, and public and political backing for these sites allows for the opportunity to create model development projects that can serve as a guide for future growth.

The recent economic upturn has resulted in significant investment in existing and new housing throughout San Antonio, as well as redevelopment or expansion of several transformational development sites.

Challenges

Despite our numerous assets, San Antonio does lack some key features and faces challenges that impact the future growth and health of our community.

UNCHECKED EXPANSION

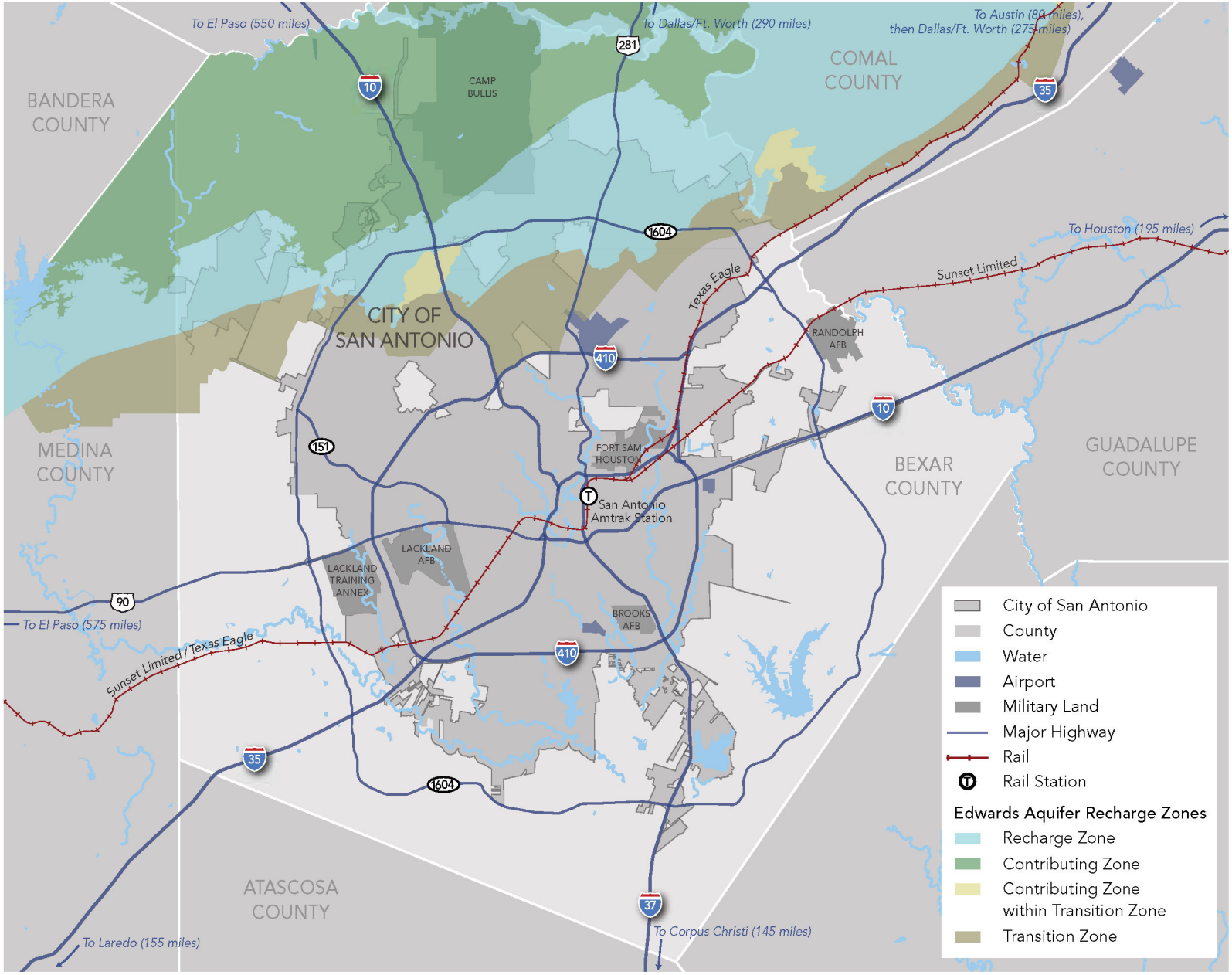
Historically, San Antonio has had no major physical or political constraints to outward expansion. However, this is no longer the reality for the city. The boundary in the north and northeastern parts of the city have effectively reached the edge of Bexar County and the boundaries of multiple jurisdictions on the north including Boerne, Bulverde, Converse, Live Oak, Schertz, Universal City and others. The western edge of the city has begun to enter Medina County. This continued outward expansion has led to the perception of disinvestment in the urban core.

Changes to annexation law in 1999 made annexation more onerous for the city. As a result, San Antonio greatly curtailed its annexation efforts from 2000 to 2012. In the absence of annexation, a large amount of development occurred in the unincorporated portion of Bexar County, where the County has limited oversight. This has led to an inability to adopt zoning, perform residential building inspections, and raise any revenue to offset the new development costs to the County. Any development within the city's extraterritorial jurisdiction (ETJ) is subject to some of the city's development standards, but no mechanisms exist for enforcement once subdivision plats are approved.

DEVELOPMENT CAPACITY

San Antonio's developable land capacity is constrained by physical and environmental barriers such as the 100-year floodplain, the Edwards Aquifer Recharge zone, steep slopes and environmentally critical habitats. It is estimated that these barriers create an estimated 27% reduction in development capacity. The northern portion of our city and Bexar County are particularly impacted by these barriers. For example, development potential in certain areas of San Antonio was met with concerns over potential impact of the Edwards Aquifer Recharge zone. In other areas, steep topography makes the provision of sewer service costly and challenging.

Moving forward, our community must work towards a more coordinated approach for identifying areas of development and coordinating the provision of utilities.



Edwards Aquifer Recharge Zones

COMPETITION AND TRENDS

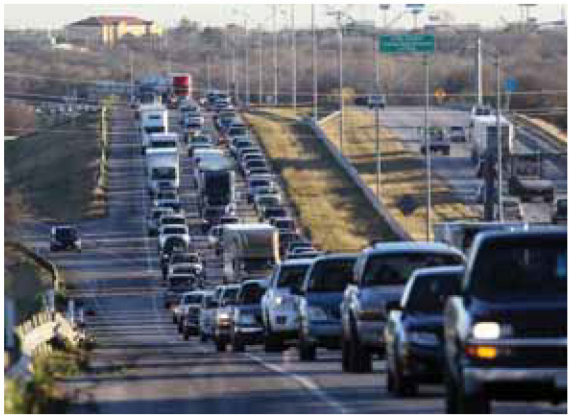
Over the past decade, San Antonio has been capturing a decreasing share of single-family home development within the Metropolitan Statistical Area (MSA) and now captures less than half of such new development. Developers have begun working in unincorporated parts of Bexar County for reasons including favorable public financing structures provided by the County, leading to a large amount of development outside the city's boundaries and control. Single-family home buyers over the past decade have transitioned to the suburbs where lower homes prices and new infrastructure have allowed for easy access in and out of the city's periphery.

However, market trends and land capacity analysis indicate that these recent growth patterns are changing. The north and northwestern portions of the county that saw so much recent growth are nearing build-out due to the lack of available land, topographic constraints, traffic congestion and corresponding challenges for utility service. A shift to the west, and to some degree to the south, is expected to occur. The city's ability to create policies and infrastructure (utilities, schools, services, etc.) may provide additional shifts either to locations within the city limits or expansion into other counties.

AUTO-ORIENTED CITY FORM

The prevalence of highways and single-family neighborhoods in San Antonio created an auto-centric city form. A car is needed for most daily trips and the existing highway system is a significant barrier for non-auto travel modes. While our topography is generally flat, and we have a strong street grid system in older neighborhoods, our outward growth has been precipitated by a highway development pattern. Given the road network and limited multimodal access, subdivision development of this nature is often more isolated than neighborhood-focused development types that incorporate multiple options for travel.

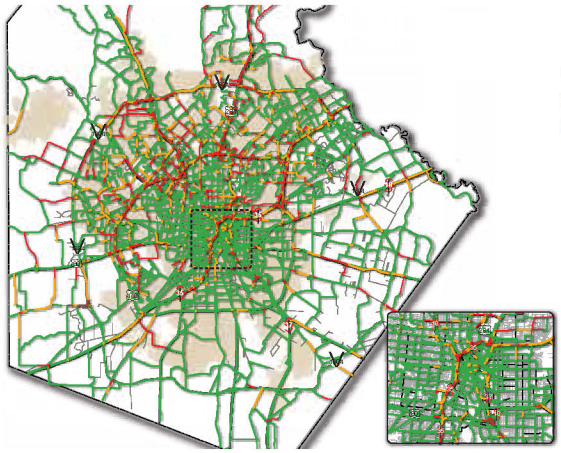
Older subdivisions often lack basic pedestrian amenities, but have more road connections between the interior system and the main arterials. Newer subdivisions have very poor internal connectivity, often with many cul-de-sacs and a limited number of intersections. External connectivity is also very poor due to numerous new subdivisions relying heavily on the same arterial and collector roadways for basic travel outside the subdivisions to downtown, activity centers and other subdivisions.



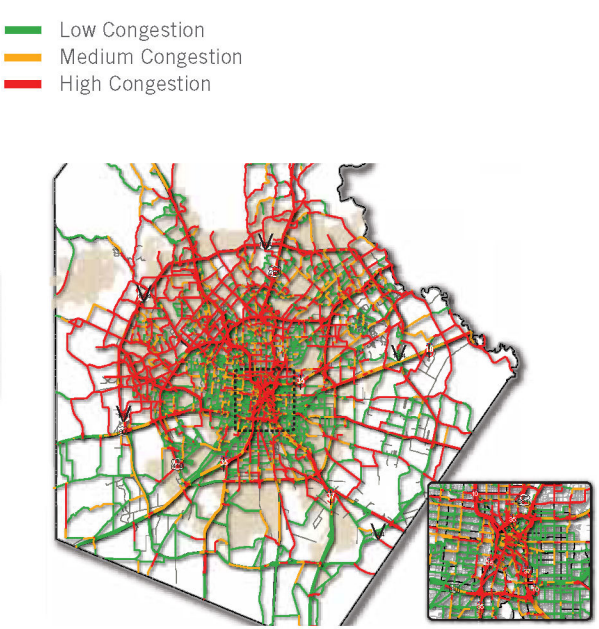
The auto-oriented nature of existing development around the community increases dependency on the automobile and results in increased congestion and time on the road.

CONGESTION

Projected population growth and an increase in vehicle miles travelled (VMT) will lead to congestion throughout our city, especially on the far west side, downtown and the far north side. To manage this congestion many of the improvements included in regional infrastructure plans focus on the region's interstate highways. Yet as interstates become continually congested, stress will be placed on our streets, specifically major and minor arterials, as people look for alternate routes. For example, the north side of the city is expected to be heavily congested by 2040, with all major roads on the north and west sides of the city outside of Loop 410 over capacity with the exception of Wurzbach Parkway. The south side will experience significant congestion as well, with most major north-south roads operating at a failing level of service. The inner east and southwest sides are the only areas of the city that would still have available capacity (20% or greater) on their road network.



2010 Congestion Levels

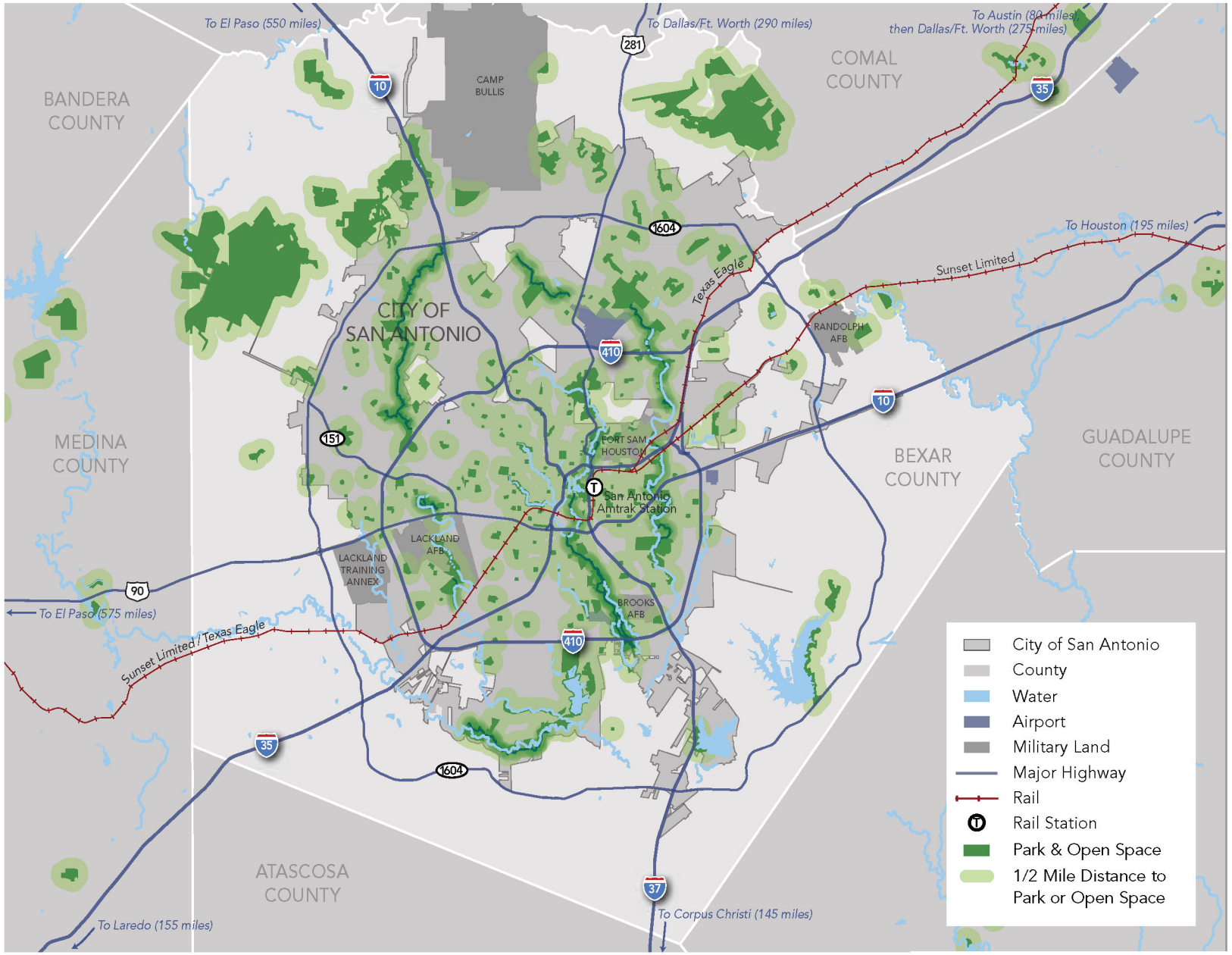


2040 Congestion Levels

MOBILITY AND ACCESS

Equitable access to a well-developed multimodal network and a connected city are critical aspects of our future growth. While walkable neighborhoods have been a goal in urban areas across the U.S. for years, San Antonio did not fully take on this planning initiative until the SA Tomorrow effort began. The goal of a walkable neighborhood is to provide residents safe and convenient access by walking, bicycling, or transit increasing connectivity to many of the places and services they use daily. In short, it's a neighborhood where residents can have a high quality of life without needing to rely on a personal vehicle for all trips.

San Antonio's low walk score of 34 (on a scale of 100) is a clear sign of our car-dependent community. Walk scores are based on measures of pedestrian friendliness including population density, block length and intersection density and points are awarded based on a location's proximity to a variety of amenities in different categories. A score of 90-100 would indicate a "Walker's Paradise." Our community's relative low number of bike lanes and insufficient amount of public transportation options are additional barriers we must address when working towards walkable and accessible neighborhoods.



Access to Existing Parks and Open Space

While walkability and connectivity of each neighborhood is important, our city also needs to address larger scale issues of green space integration. We need to support residential development within 1/2 mile of parks and other public recreation facilities, as well as find ways to better integrate and connect waterways, drainage ways and the buffer zones around military installations.

SOCIAL EQUITY AND AFFORDABLE HOUSING

Our city has among the highest levels of income segregation in the country. Often accompanied by clear geographic concentrations of poverty, economic segregation has numerous deleterious effects on the less fortunate members of our community. Lower-income individuals typically have reduced rates of economic mobility and often live in areas that struggle to attract jobs and residential amenities. In addition, these families tend to live in areas with lesser educational opportunities and their children often struggle in school.

Habitat for Humanity of San Antonio (HFHSA) works with hardworking, low-income families who would not otherwise be able to afford a home to help them build affordable houses for themselves and their families at no interest and no profit.

Economically segregated groups in the San Antonio area may also face challenges achieving and maintaining healthy lifestyles. Generally speaking, racial and ethnic minorities and those with lower educational and income levels have the poorest health outcomes. This is attributed to difficulty in accessing healthcare, healthy food options and recreational opportunities. As of 2014, 28% of adults and 12% of children were uninsured in Bexar County and it is estimated that almost 20% delayed medical care due to unaffordable costs. In addition, healthcare resources are not equally accessible in all parts of our city-access by non-automobile modes is often difficult or impossible.

A higher proportion of San Antonio's low-income residents (13%) live at least one mile from a grocery store, compared to 12% in Texas and 7% nationwide. Finally, several areas, particularly in the west and southwest, offer significantly fewer acres of parks facilities per 1,000 residents than other areas of our city. Our community must work to minimize economic segregation, provide equal opportunities and access to resources and foster programs that empower low-income residents.

Economic segregation is also a factor contributing to our city's affordable housing gap. The city's Comprehensive Needs Housing Assessment and Strategic Housing Plan (2013) concludes that San Antonio's housing market is increasingly unaffordable; fewer than 50% of homes on the market are priced attainably for families with median incomes. Areas with higher concentrations of affordable housing are primarily located in the near-east and near-west side neighborhoods around downtown and in the southern part of the city. Housing affordability issues are further compounded for many of our residents when transportation costs are included. Less than 30% of households in the San Antonio-New Braunfels Metropolitan Statistical Area (MSA) live in areas that are considered affordable when total housing plus transportation costs are considered.

DECLINING NEIGHBORHOODS

A cycle of disinvestment has perpetuated the problems witnessed in our community's declining neighborhoods today and contributed to under-performing schools and depressed infrastructure. The southern and central portions of San Antonio are especially at risk for high income disparity. San Antonio's rapid growth to the north has diverted much of the city's capital investment and other resources away from core neighborhoods inside Loop 410. These areas generally have an auto-oriented urban form with low walkability and few destinations easily accessed without a vehicle. This creates an environment that limits many residents' mobility and access to crucial important needs such as education, healthcare, recreation and job opportunities.

ENVIRONMENTAL SUSTAINABILITY

Population growth and business expansion will increasingly strain our city's environmental health. Air quality, water supply, drainage and mitigating impacts from climate change and extreme weather are all challenges we face. Our air quality has been worsening for many years. San Antonio must lead the region in striving to maintain compliance with state and federal requirements that help ensure the safety and health of our residents, especially with an additional 500,000 cars on our roads by 2040.

Water supply, water quality and drainage are critical issues. The San Antonio Water System (SAWS) has made great strides ensuring a diversified water supply and helping our city lead the nation in water conservation and recycling programs. However, the city and all its residents and businesses must collaboratively continue and strengthen our efforts. Drainage and water quality are also ongoing challenges that may be intensified by increasing instances and severity of extreme weather events. Flooding is a historic problem in the area and, in addition to safety and property damage implications, it can have serious negative effects on the health of our rivers and streams.

Chapter 3: Vision Framework

This chapter summarizes the vision, guiding principles and cross cutting themes that were developed throughout the SA Tomorrow planning process and comprise the Vision Framework of the Comprehensive Plan.

Collectively, the Vision Framework provides the direction for all subsequent chapters and sections of this document. The Plan Framework, the Plan Element goals and policies, as well as the specific implementation strategies are intended to position the City of San Antonio, its partners and the larger community to realize the future envisioned throughout this chapter.

Vision

The vision for San Antonio in 2040 is based upon the robust foundation provided by SA2020. The original SA2020 vision originated with a series of public forums conducted throughout 2010 to develop goals for improving San Antonio by the year 2020. Thousands of San Antonians participated in the visioning process, which culminated in a detailed report released in 2011 that outlined a bold vision for San Antonio's future.

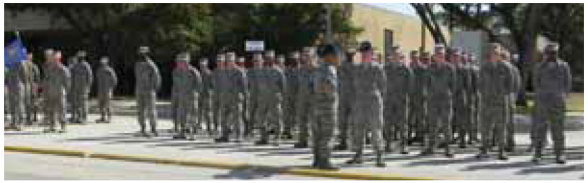
The vision articulated in SA2020 has been augmented to reflect the community's vision that has been extended through 2040 and integrates many of the key themes that emerged throughout the Comprehensive Plan process and the larger SA Tomorrow effort. Key additions include the important components of regional centers and corridors, historic and cultural assets and inclusivity. The following summarizes our community's vision for San Antonio in 2040.

SA Tomorrow is the story of a great American city.

San Antonio is a dynamic city with neighborhoods that are complete with unique places that define their character and celebrate our history. Our corridors unite our residents and our businesses, using cutting-edge multimodal options that connect our neighborhoods to vibrant regional destinations. Our infrastructure supports a healthy and safe lifestyle while making San Antonio an efficient, resilient city. Our economy is the envy of the country, with a thriving and ever expanding business sector. San Antonio maintains an elite status in the country, supporting the military missions that keep our country safe while supporting the vast number of military personnel that call San Antonio home. We nurture our future, with a thriving natural environment as well as quality education and opportunities for all children…they will inherit a truly great and sustainable city.

San Antonio is a diverse and thriving community, with a local government that's accountable, innovative and responsive.

This is the story of a great American city…SA Tomorrow.




prima


CAUTION

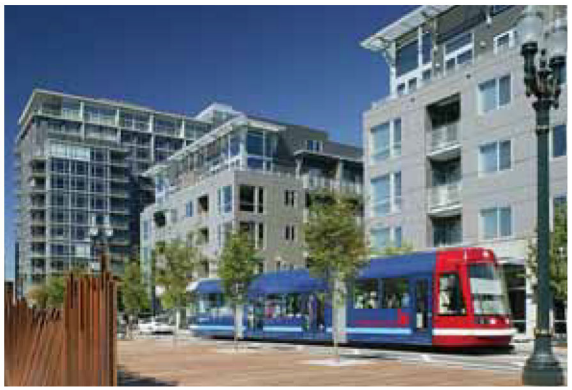
Guiding Principles

The following principles establish a higher-order decision-making framework to guide the growth and evolution of the City of San Antonio for the next 25 years. The guiding principles were developed throughout the Comprehensive Plan process to support the vision and set clear priorities for plan development. The guiding principles articulate the overarching direction for the plan recommendations while also framing a set of criteria for evaluating unanticipated opportunities and potential deviations from the specific direction set in this document. The nine guiding principles include:

1. Maintain the character and integrity of existing San Antonio neighborhoods, parks, open space and trails by focusing growth in mixed-use regional centers and along attractive multimodal corridors with high performing transit service.

2. Ensure that all residents living in existing and new neighborhoods have safe and convenient access to jobs, housing, and a variety of amenities and basic services including great parks, strong schools, convenient shopping and nearby regional centers.

3. Connect safe and stable mixed-income neighborhoods with a system of walkable and bikeable streets, trails and pathways that celebrate and link natural greenways and drainage ways.



4. Ensure an inclusive San Antonio by providing affordable housing and transportation choices throughout the city.

8

Provide an ongoing planning framework for more detailed and timely planning and design of regional centers, corridors and neighborhoods with continued opportunities for participation and partnerships, prioritization, and performance measurement.

9

Provide the residents of San Antonio, including youth, seniors, and disabled populations, with enhanced levels of authentic engagement.

7

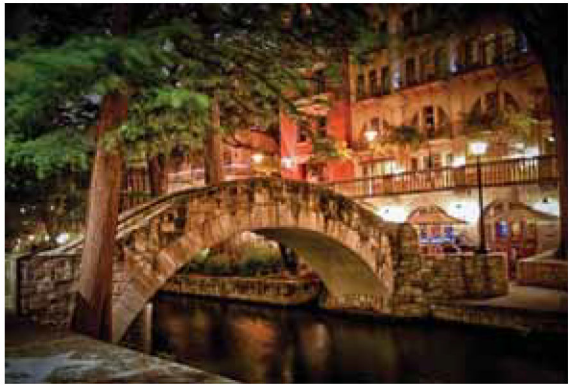
Encourage and integrate innovative and sustainable ideas and development.

5

Encourage a variety of amenity-rich places throughout the city with a balance of live, work and play opportunities.

6

Conserve, protect and manage San Antonio's natural, cultural and historic resources and open space.



Cross Cutting Themes

In order to ensure that the identified strategies of SA Tomorrow are specific to the needs of San Antonio, five cross cutting themes were identified through the Sustainability Plan process that address high priority issues for the community. The cross cutting themes are important to every aspect of the SA Tomorrow Planning efforts, including each of this Plan's major components and elements.

These priorities create the lens through which potential recommendations in this document were evaluated to ensure that the themes are considered through prioritization, implementation and future re-evaluation.

Our Cross Cutting Themes for SA Tomorrow are:

ECONOMIC VITALITY

A thriving economy is key to long-term sustainability. Strategies identified through the planning process will be assessed for their potential impact (positive, neutral, or negative) on the local economy.

AIR QUALITY

Continuously finding opportunities to improve air quality is a priority for the City of San Antonio. Strategies identified through this planning process will be evaluated to ensure they create no negative impact or, ideally enhance the quality of San Antonio's air.

WATER RESOURCES

Water is essential to life. In San Antonio the availability and quality of this resource is expected to be a challenge for years to come. Strategies identified through this planning process will be evaluated based on their ability to protect, preserve, and improve the quality of San Antonio's water.

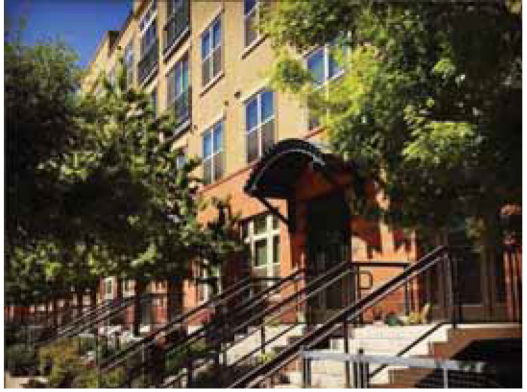
EQUITY

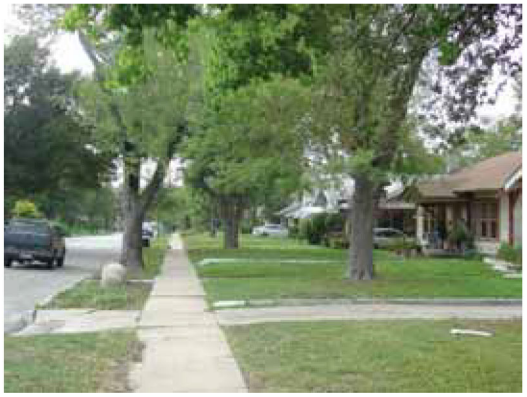
A fair and just community ensures equal opportunities for all of its members. Strategies identified through this planning process should be able to demonstrate that it will bring value to all of San Antonio's people.

RESILIENCE

Like all cities, San Antonio has a set of vulnerabilities that could weaken it. Measuring the value and identifying strategies towards reducing those vulnerabilities and enhancing resilience to all social, environmental and economic vulnerabilities is essential to ensure a sustainable future.


King William
DISTRICT
CROSSFIT





SECTION 2

Plan Framework

Chapter 4: Building Blocks

Chapter 5: Regional Centers

Chapter 6: Place Types

Chapter 4: Building Blocks

Our continued growth and development as a city can help us achieve our vision for 2040. It will require a shift in the way we are doing things now, and the public and private investments necessary to accommodate 1.1 million additional residents can be leveraged to improve livability, sustainability and inclusivity across the entire community.

The guiding principles presented in Chapter 3 set the stage for an approach to development that should benefit all San Antonians. This chapter describes a set of building blocks that will guide planning, design and investment moving forward. Each building block generally has a scale, shape and role within the larger San Antonio landscape. While often distinct from each other, in some cases these building blocks overlap and benefit from shared investments and amenities.

The major building blocks of the San Antonio of the future include:

- Neighborhoods;
- Corridors;
- Urban centers; and
- Regional centers.

SA Tomorrow recognizes the importance of our existing **neighborhoods.** These treasured assets are the foundation of our city and will continue to play a critical role in our future planning efforts. The growth strategies recommended in this plan protect and enhance these valuable parts of our city by focusing many of the new housing units and jobs into the other building blocks. By investing in our neighborhoods in conjunction with strategic planning in our corridors, urban centers, and regional centers, we ensure the ability to create and support complete communities across our city with access to a variety of amenities and daily needs and services.

San Antonio's **corridors** link our neighborhoods to each other and to the urban and regional centers that contain some of our city's major activities, attractions, and job opportunities. These corridors will be a focus of new residential and employment growth while providing safe and comfortable multimodal transportation options for a variety of users including pedestrians, bicyclists, transit users and automobiles.

Urban centers vary in size and serve as community destinations and employment nodes for multiple nearby neighborhoods. These walkable, mixed-use destinations are generally smaller in scale, but as San Antonio's population increases, they have the potential to become future regional centers. Key to the development of these areas is increased multimodal connectivity, linking them to surrounding residential areas and other urban and regional centers.

Regional centers are the employment and activity nodes of our city and provide the best opportunity for absorbing our projected population and employment growth in a way that preserves and maintains the character of our valued

Continued investment in our downtown and other regional and urban centers will help manage our growth and provide places for our residents to live, work and play.

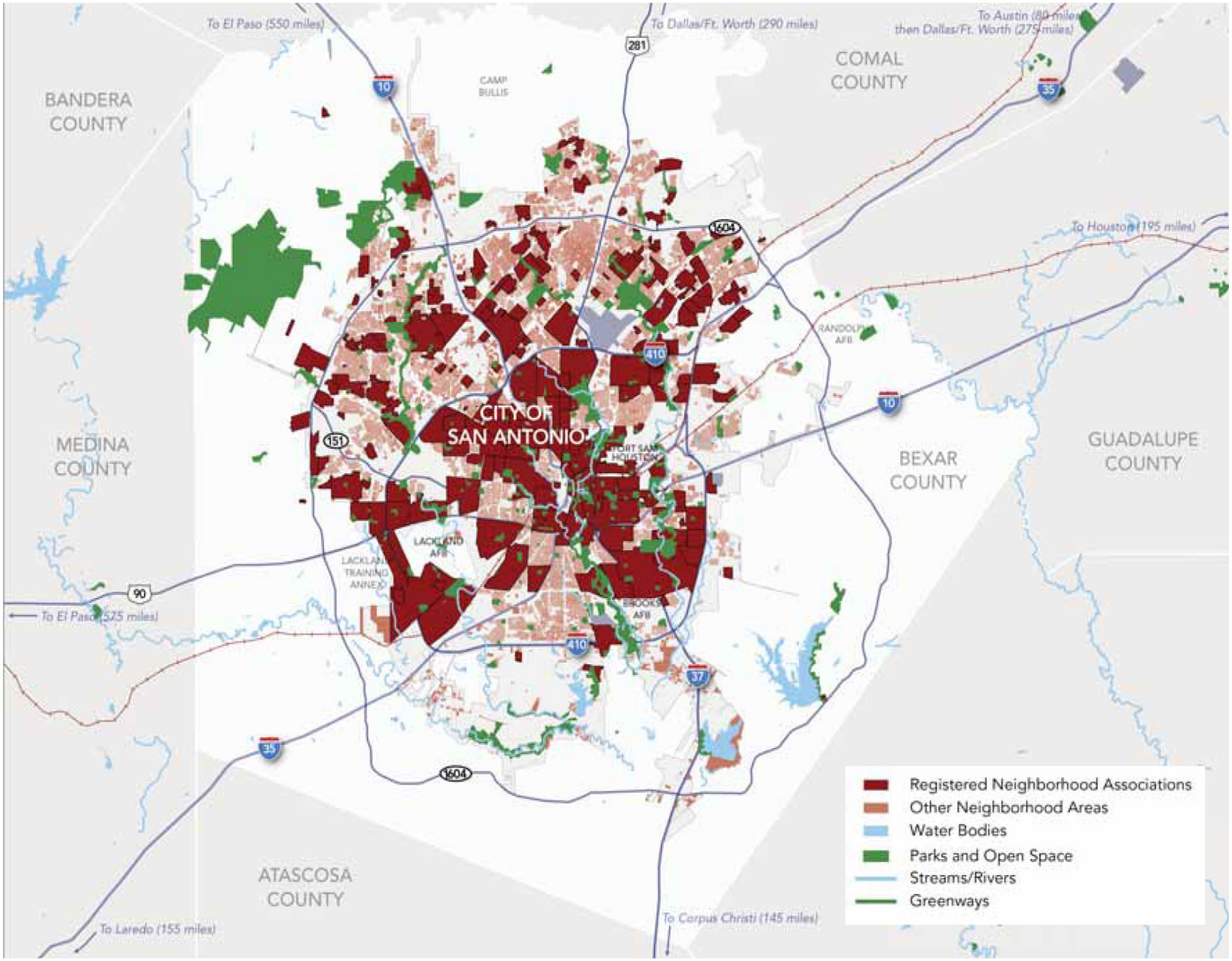
neighborhoods. Each center currently employs at least 15,000 people. The influx of additional residents and employees over the next 25 years will attract enhanced amenities and connectivity that will benefit communities across San Antonio. While regional centers are briefly discussed in this chapter, more detail and specific examples are provided in Chapter 5.

The final section of the chapter introduces place types; a concept the city can use to help guide appropriate growth in the building blocks identified above and leverage and protect San Antonio's unique existing assets. These twelve concepts identify development options for parks, trails and open spaces, multimodal, mixed-use sites and adaptive reuse opportunities. Place types are explored in more detail in Chapter 6.

Complete Neighborhoods

The first building block is perhaps the most vital as it will continue to be home to the majority of San Antonio's residents. Our neighborhoods are the backbone of the San Antonio community, an essential element of the city form and a source of pride for most residents. They occupy the areas between regional and urban centers and the corridors that connect them. In some cases, the edges of neighborhoods bleed into regional centers and corridors frequently serve as the boundary between two or more neighborhoods. The approach of focusing many of the new housing units and jobs into regional centers, urban centers and corridors is largely a way to maintain and protect existing neighborhoods and ensure the ability to continue providing neighborhood housing options during the coming decades.

A complete neighborhood provides residents safe and convenient access to the goods and services they need on a daily or regular basis. This includes a range of housing options, grocery stores and other neighborhood-serving commercial services, quality public schools, public open spaces, recreational facilities and access to frequent transit. A complete neighborhood also includes an interconnected network of streets, sidewalks and trails that makes walking and bicycling within and to these places safe and relatively easy for people of all ages and abilities.



Registered Neighborhood Associations

Both existing and new residential development benefit from the amenities and services associated with complete neighborhoods.

PRESERVATION AND ENHANCEMENTS

Throughout the SA Tomorrow community engagement process, residents expressed their concerns that the plan would threaten their existing neighborhood and potentially even their homes. To the contrary, the plan is a blueprint for focusing future growth and development away from existing neighborhoods and into regional centers, urban centers and along major transportation corridors. When coupled with the creation of new neighborhoods in currently undeveloped areas of the city, the result will be less development pressure on existing neighborhoods. The plan element focused on housing (Chapter 10) includes a comprehensive set of goals and policies related to housing and neighborhoods, many of which focus on protecting and enhancing existing areas. Enhancements may include, but are not limited to improvements to infrastructure, adding new shops and restaurants nearby, providing better facilities for walking and biking, increasing the tree canopy and adding new parks and trails.

AMENITIES AND SERVICES

Having safe, convenient and walkable access to schools, parks, grocery stores and transit can help our residents save money and stay healthy. Regardless of the mode of travel chosen, shorter distances between home and the places we need to go on a daily and weekly basis can help decrease overall costs for individuals and households. Lower transportation costs help reduce overall household expenditures and increase housing affordability. And incorporating daily exercise is a lot easier with a safe network of sidewalks outside your door. Complete neighborhoods may not contain all of the amenities and services someone would want on a daily basis, but they should provide access to many of these amenities and services and have at least one or two destinations that are easy for someone to access by walking or biking.

Amenities and services associated with a more complete neighborhood can be organized into three major categories: transportation and related infrastructure; civic amenities; and commercial destinations.

Transportation and Related Infrastructure: Improvements to infrastructure in and between neighborhoods helps to close gaps in the transportation network, improve safety and enhance comfort. Potential infrastructure improvements can include, but are not limited to:

- Sidewalks, crosswalks and curb ramps;
- Furnishings and lighting;
- Bike lanes, cycle tracks, and multi-use pathways;
- Pedestrian and bicycle bridges and underpasses;
- Enhanced transit stops and stations;
- Landscaping and community gardens;
- New or improved roadways and overall streetscapes;
- Signalization, signage and other intersection control/communication; and
- Gateway treatments, signage and wayfinding.

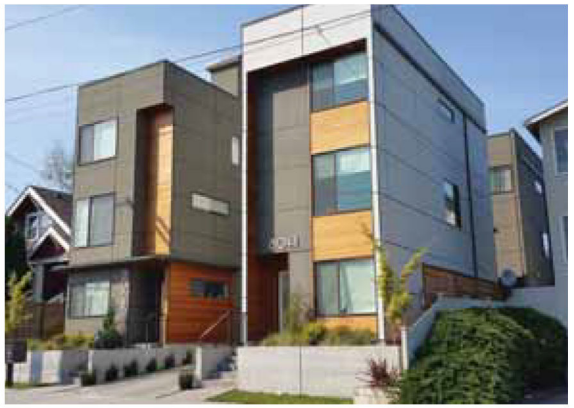
Civic Amenities: The integration of civic amenities in the larger neighborhood context can help to anchor residential and mixed-use areas, as well as provide social, recreational and cultural opportunities for residents close to home. Potential civic amenities can include, but are not limited to:

- Parks, open spaces and sport courts and fields;
- Community, recreation, youth and senior centers;
- Pools and water play areas; and
- Libraries.

Commercial Destinations: Many people equate a complete neighborhood with having shops and restaurants nearby that they can easily access. Commercial destinations that are local to one or more neighborhoods help to reduce the distance of many trips across the community, including the daily commute for people who are able to work close to home. Commercial destinations can include, but are not limited to:

- Grocery stores and markets;
- Farmers markets;
- Restaurants and bars;
- A variety of retail shops;
- Professional services; and
- Convenience services.

Connectivity between neighborhoods increases access to amenities and services.



Stacked flats in Seattle, Washington integrate four well-designed residences into a standard single-family parcel.

Walkable and well connected neighborhoods help to keep our residents active and healthy.

NEIGHBORHOOD CONNECTIVITY

A neighborhood can be made more complete with improved connectivity to amenities and services nearby with safe and comfortable linkages. In many cases, amenities may be nearby, but are not accessible for one or more transportation modes. In addition, making active transportation and transit more viable options for a greater portion of the community requires larger network connectivity between neighborhoods and from neighborhoods to nearby centers. For these reasons it is critical that our community focus resources on improving neighborhood connectivity through a variety of infrastructure enhancements.

Existing and planned neighborhoods can be designed in a variety of ways resulting in varying levels of connectivity and accessibility. More traditional suburban development patterns include large arterials feeding into relatively disconnected subdivisions with a large number of cul-de-sacs. While this traditional development pattern does have impacts on traffic for motor vehicles, it does not necessarily preclude good pedestrian and bicycle connectivity. In fact, pathway and trail connections combined with on-street and sidewalk facilities can make these more traditional developments quite supportive of pedestrians and bicyclists accessing transit or other nearby amenities. The use of drainage ways and utility corridors can provide pathway opportunities that link disconnected portions of a neighborhood.

Similarly, more compact development can be difficult to traverse as a pedestrian or bicyclist if infrastructure is missing or inadequate. Major arterials often separate neighborhoods from commercial destinations, civic amenities and other neighborhoods. Well connected and maintained sidewalks, bike facilities and crossings are critical elements to making a neighborhood more complete.

HOUSING CHOICE AND DIVERSITY

Another key aspect of a complete neighborhood is ensuring housing choice and diversity within and across neighborhoods. The majority of housing in San Antonio is currently detached single-family homes. A complete neighborhood should have a range of housing types and sizes (single-family detached, single-family attached and multifamily housing) for rent and for sale. Additional variety should be provided with a range of home sizes in the form of overall square footage and number of bedrooms.

Corridors

Nearly all of San Antonio's regional centers and urban centers are located along or at the intersection of major transportation corridors. Attractive, multimodal corridors will help connect regional and urban centers to each other. Many will include premium transit service to help manage congestion and bolster safe, convenient and affordable transportation options. But, the corridors must serve more than just a transportation function. Successfully implementing the SA Tomorrow vision means rethinking those corridors. We need our corridors to provide safe and comfortable access and mobility, serve as attractive gateways and frame compact, walkable mixed-use development. They will also be targeted for higher-density housing and more employment opportunities. A multi-objective and multi-layered approach to corridor improvements can help ensure they are safe, comfortable and attractive for future residents, employees and nearby existing residents.

VIA's Vision 2040 comprehensive transit plan calls for five priority Primo bus corridors to expand on the existing Primo bus route on Fredericksburg Road; the existing Primo route on Fredericksburg Road is planned for Primo Plus or LRT service.

MULTIMODAL CORRIDORS AND COMPLETE STREETS

Many of the community's major transportation connections are auto-oriented and difficult for pedestrians and cyclists to navigate. Our transportation corridors should serve multiple modes of transportation and better balance the needs of pedestrians, cyclists, transit patrons, motorists and freight vehicles. Allowing a certain mode of transportation or even providing a dedicated facility for pedestrians or cyclists may not be sufficient.

The quality and condition of pedestrian, bicycle and transit infrastructure contributes greatly to the attractiveness, safety and use of these facilities. For example, a narrow sidewalk with no buffer between pedestrians and speeding traffic, no landscaping and no furnishings will be less attractive, safe and used than a wider sidewalk with attractive lighting, benches and a wide planted buffer with large street trees.

VIA PREMIUM TRANSIT CORRIDORS

VIA's Vision 2040 Plan identified several corridors for premium transit service. VIA selected the corridors based on existing and potential concentrations of transit users and for their ability to connect two or more regional centers. The premium transit corridors are organized into three types of premium transit service: Priority Primo Bus Corridors, Primo Plus and Light Rail Corridors, and Express Routes.

A modern and diverse transit system includes a variety of modes, speeds, and frequencies and typically includes some combination of traditional bus, bus rapid transit, express bus, and light rail transit.

Priority Primo Bus Corridors

Priority Primo Bus Corridors provide high frequency transit service with a premium transit vehicle in a shared roadway configuration. The following corridors have been identified as priorities for Priority Primo bus service:

- Looper Premium – Connects the airport, Brooks City Base, South Park Mall and Lackland Air Force Base;
- Randolph – Connects the Central Business District, AT&T Center and Randolph Air Force Base;
- Huebner-Grissom – Connects the Medical Center, Leon Valley and Alamo Ranch;
- General McMullen – Connects South Park Mall and the Medical Center; and
- Bandera – Connects the Central Business District to Leon Valley.

Primo Plus and Light Rail Transit

Primo Plus and Light Rail Transit will provide high frequency transit service with a premium transit vehicle in a dedicated guideway configuration. Primo Plus service will be rubber tire bus service and light rail transit (LRT), utilizing a dedicated rail alignment. The following corridors have been identified as priorities for Primo Plus bus service and LRT service:

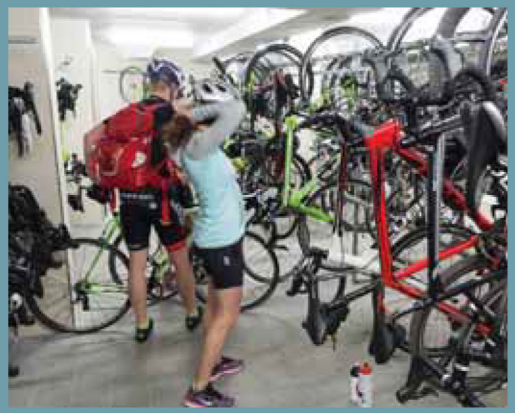
- Zarzamora – connects the Medical Center, Crossroads Mall, South Park Mall and Texas A&M University-San Antonio;
- Commerce/Houston – connects the AT&T Center, the Central Business District and Lackland Air Force Base;
- Fredericksburg – connects the Central Business District, Crossroads and UTSA;
- San Pedro – connects the Central Business District, the airport, Blanco and Stone Oak;
- Austin Highway/ Broadway/Perrin Beitel/ Nacogdoches – connects the Central Business District, Pearl, University of the Incarnate Word and Rolling Oaks;
- New Braunfels Avenue – connects the Central Business District, Pearl and Brooks City Base; and
- Rockport Sub – connects the Central Business District and Brooks City Base.

Express Routes

The Priority Primo, Primo Plus and LRT corridors will be supplemented by express bus routes utilizing freeways and connecting many of the regional centers. Eleven express routes will have limited stops, 15-30 minute headways between buses and function in mixed traffic.

Transportation Demand Management

Transportation demand management (TDM) should be deployed in urban centers and all regional centers. Robust TDM programs use an array of data collection and management tools to encourage the efficient use of the transportation system. TDM encompasses a broad variety of programs, policies and strategies that encourage alternatives to driving alone such as car sharing, employer and development-based programs that offer incentives to ride transit, and public education and marketing programs to promote transit and other alternatives to driving.



Urban Centers

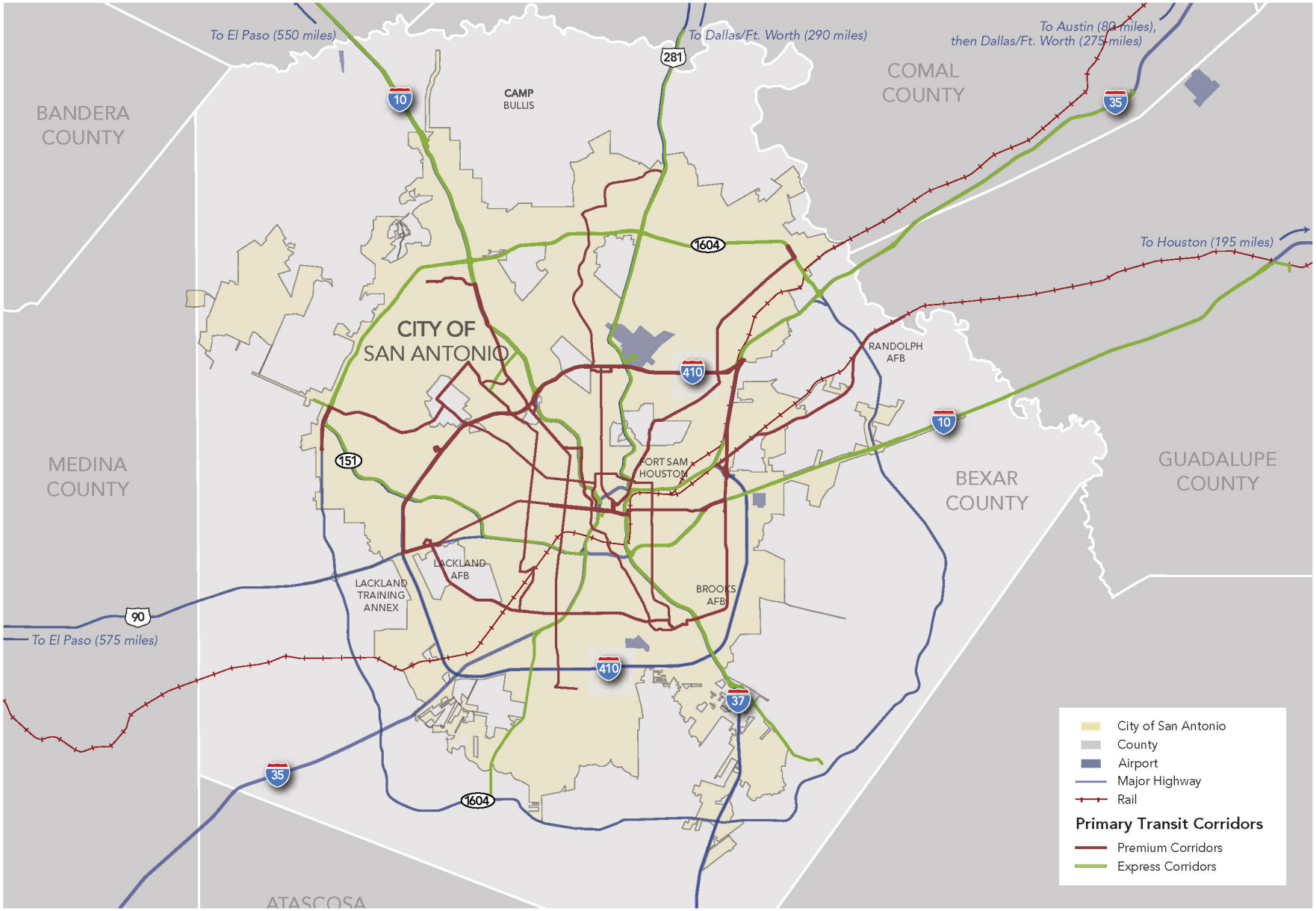
San Antonians need and deserve walkable, mixed-use destinations outside of the regional centers. Urban centers will provide these opportunities and in certain instances, can serve as the nucleus of a future regional center.

These urban centers are compact and walkable, and can help to fill the gaps between regional centers. The common elements of a successful urban center are a central node of activity, a mix of opportunities to live, work and play, good transit access and strong multimodal connections to surrounding neighborhoods. These areas will attract new residents and serve existing nearby neighborhoods.

MIXED-USE LAND USE PATTERNS AND TRANSITIONS

Existing and future urban centers should contain a mix of uses and provide a combination of daily goods and services, as well as restaurants and some element of destination retail. Housing and offices are desirable but not required components of an urban center—the neighborhoods surrounding the center can provide the necessary population to support the center from a market perspective. With that said, the most vibrant urban centers will include housing and a larger employment component to support increased development density, a larger critical mass of shopping and dining, shared parking opportunities and stronger potential for activating the center during multiple times of the day and days of the week. Regardless of the overall land use mix, an activating node of some sort is at the heart of every urban center. The activating node can vary, but will typically include a transit station, institutional anchor and/or a clustering of shops and restaurants.

While urban centers should be targeted for higher-intensity development, the height and massing of structures in the urban center should decrease as they approach existing single-family neighborhoods. Destination retail and uses generating a significant amount of traffic should be focused at least two to three blocks from single-family homes wherever possible. Attached single-family and multifamily development can create a desirable transition from higher-intensity urban center uses out to surrounding traditional neighborhoods.



Primary Transit Corridors

Proximity of housing to urban centers in Charlotte, North Carolina (top) and multiuse paths in Indianapolis (bottom) provide access for residents.

TRANSIT-SUPPORTIVE DEVELOPMENT

A strong transit system is a major pillar of the vision for San Antonio in the coming years. But, it isn't enough to say that we need more transit and better access to transit. We have to plan for it and make it happen. Transit systems function best when they are well integrated with and supported by local land use and community design decisions. Supporting transit requires looking at how streets and roads are built and the mix of land uses around them, making it easy for people to access transit and making sure people have reasons to ride transit.

Urban centers provide the greatest opportunity for transit-supportive development outside of regional centers. Compact, higher-density development patterns shorten the distance people must travel to reach their destinations and supply the ridership that can support more frequent transit service and a greater variety of routes. In turn, higher service levels in these areas attract more riders and support the local land use vision. This self-perpetuating nature of urban centers is a large reason for their vibrancy and why they tend to attract private development.

NEIGHBORHOOD CONNECTIVITY

While not all urban centers include a strong residential element, they must always provide safe and comfortable connections and transitions to the surrounding residential neighborhoods. Urban centers provide amenities or additional options for nearby residents. Safe on-street and off-street walking and biking connections link the core of urban centers to surrounding residential areas and decrease the impacts of traffic on surrounding neighborhoods.

Decreasing automobile use in urban centers is intimately related to the availability and cost of parking. Parking can have a significant impact on peoples' decision to drive, walk, bike or use transit. The less land devoted to parking, the more space that is available for other uses. This puts more destinations within walking distance, creates a more comfortable pedestrian experience, and helps an area reach a development intensity that supports public transportation and spurs additional development. Additionally, reduced parking requirements can lower the cost of new development, making housing and commercial rent more affordable. The city should explore neighborhood parking permit programs as part of a larger management strategy for urban centers and adjacent neighborhoods.

Regional Centers

San Antonio has a tremendous opportunity to take advantage of a polycentric pattern of regional employment centers that has developed here during the past decade. Most cities have a downtown and a few additional mixed-use employment clusters. San Antonio has 13. About 50% of all jobs in San Antonio are within those 13 regional economic centers, which have captured over half of all non-residential development since 2000.

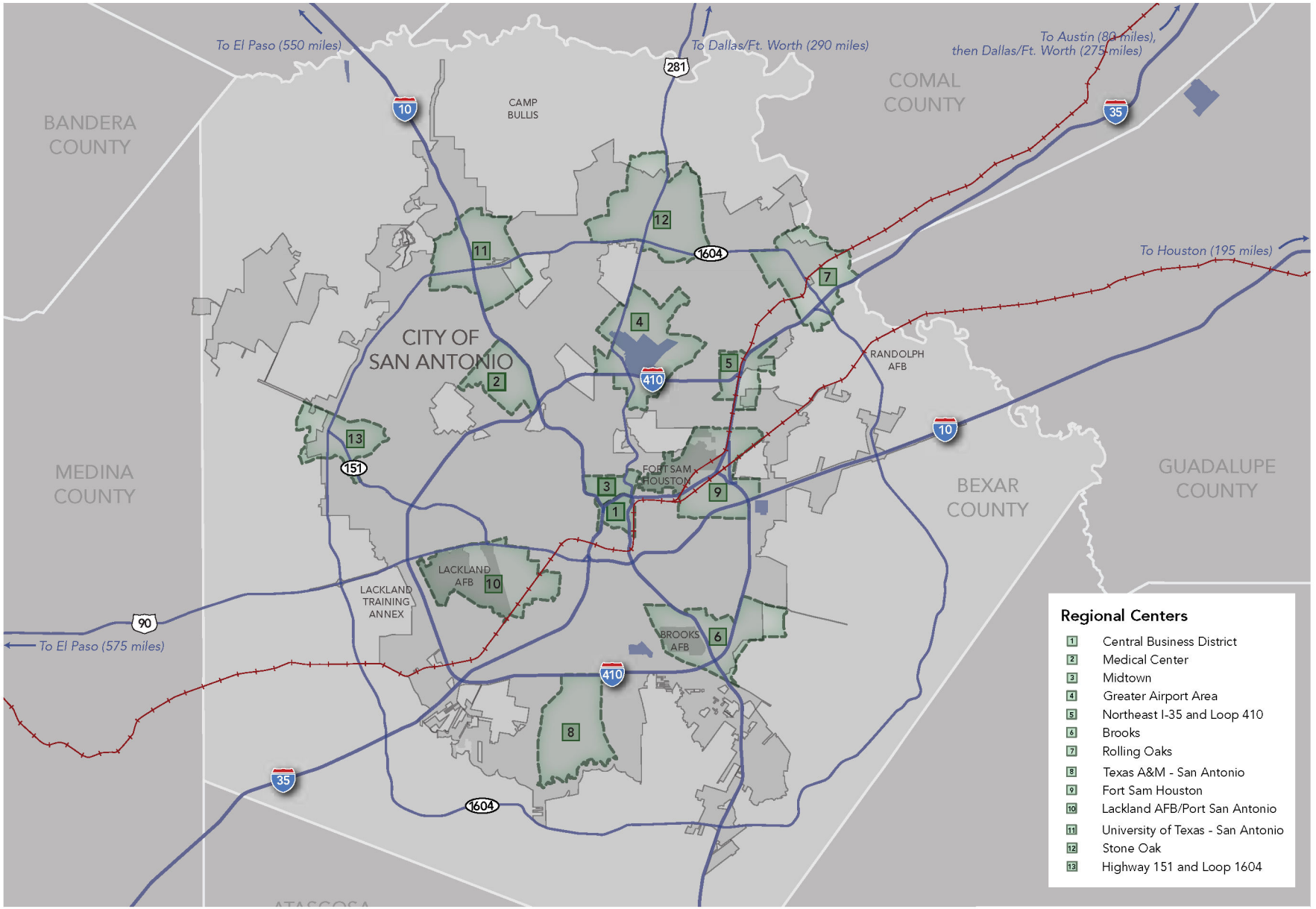
A major organizing element for the Comprehensive Plan is to focus growth in these regional centers, building on the existing pattern of development. They're envisioned as new "places" where we live, work and play.

New development is already gravitating to these centers and we can guide additional growth in these areas. Each center is different and its development will be influenced by its existing uses (particularly those oriented to military, aviation or heavy industry). However, many of the centers are also well positioned to develop as vibrant mixed-use places. They offer a variety of housing options and price ranges, allow higher-density and incorporate carefully designed and located amenities that will benefit both residents and employees of the center, as well as people in adjacent neighborhoods. While these live-work-play environments attract development and businesses nationally, they are underrepresented in San Antonio.

Our community's unique distribution of growth areas exacerbates the challenges of allocating resources and coordinating growth plans to encourage clustered businesses and spin-offs in similar industries. Each center's character can attract and retain a distinctive mix of businesses and employees. Therefore, San Antonio must focus its investment and infrastructure strategies on supporting and leveraging the unique identity and assets of each center.

Regional centers operating in isolation do not benefit our city in the same way as a connected system. To function most effectively, they must be linked to each other, smaller urban centers and our neighborhoods. Our multimodal and transit corridors ensure connectivity to, between and within each center providing access to employment opportunities and daily activities for our residents.

Regional Centers come in many shapes and sizes and include varying proportions of employment, housing and entertainment uses.



Existing Regional Centers

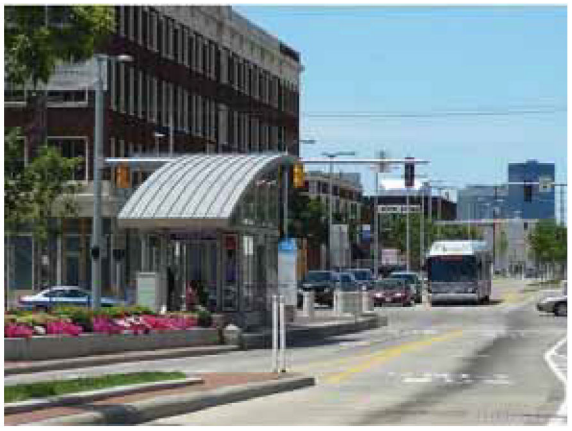
Place Types

With the major building blocks of San Antonio identified, it is important to identify the types of places that we would like them to be. Chapter 6 provides greater detail regarding the rationale, form and function for twelve place types. The place types provide the design intent and key planning and design parameters related to the development of places with a desirable mix of uses, city form, public spaces, roads and trails and parking. The place types are organized into three categories: Multimodal, Mixed-use Place Types; Trails, Parks and Open Space Place Types; and Adaptive Reuse Place Types.

Multimodal, mixed-use place types constitute a range of transit supportive development with a transit station, institutional anchor or concentration of shops and restaurants at their core.

Trails, parks and open space place types are intended to leverage and/or protect a natural or man-made open space or recreational asset.

Adaptive reuse place types acknowledge that some commercial and industrial properties can benefit from contemporary enhancements or have served their useful life for their original purpose.



Place types integrate the desirable mix of uses, city form, public spaces, roads and trails, and parking for new and infill development in well established and emerging areas of the city.


Sound Garden Hotel

Chapter 5: Regional Centers

Regional centers were introduced in the previous chapter as one of the major building blocks of San Antonio's city form. Regional centers are a major component of the Comprehensive Plan and the overall SA Tomorrow effort.

While most cities have one or two larger employment centers, we have 13. This provides challenges and opportunities. Challenges for these regional centers include distribution of resources, sufficient differentiation and managing cooperative versus competitive dynamics. Opportunities include dispersed employment throughout the city, focused specialization to increase quality and competitive advantages for targeted centers, better distributed traffic and transit networks with improved access for all residents.

This chapter will lay out a framework for understanding regional centers found in San Antonio and their importance in our community's future. First we investigate and describe the three types of regional centers that occur in San Antonio. We then build profiles for each regional center based on a thorough analysis of nine indicators that illustrate differences between them. These indicators are used to help identify each center's existing conditions and help us start thinking about achieving aspirational goals of each. These profiles will inform future regional center plans.

Three Types of Regional Centers

The 13 regional centers are grouped in three categories based on analysis of their existing conditions, unique traits and potential growth capabilities. It is important to note that they are not homogenous places. Although they cover large areas, each one includes multiple place types, urban forms and land uses.

ACTIVITY CENTERS

These areas have high concentrations of people and jobs in a mixed-use environment. They should be highly walkable and well connected by multiple types of transportation and transit. They should have an even mixture of jobs and housing and contain amenities that support residents, workers and employers within the centers and also throughout the city. Many are home to our educational, entertainment and cultural institutions.

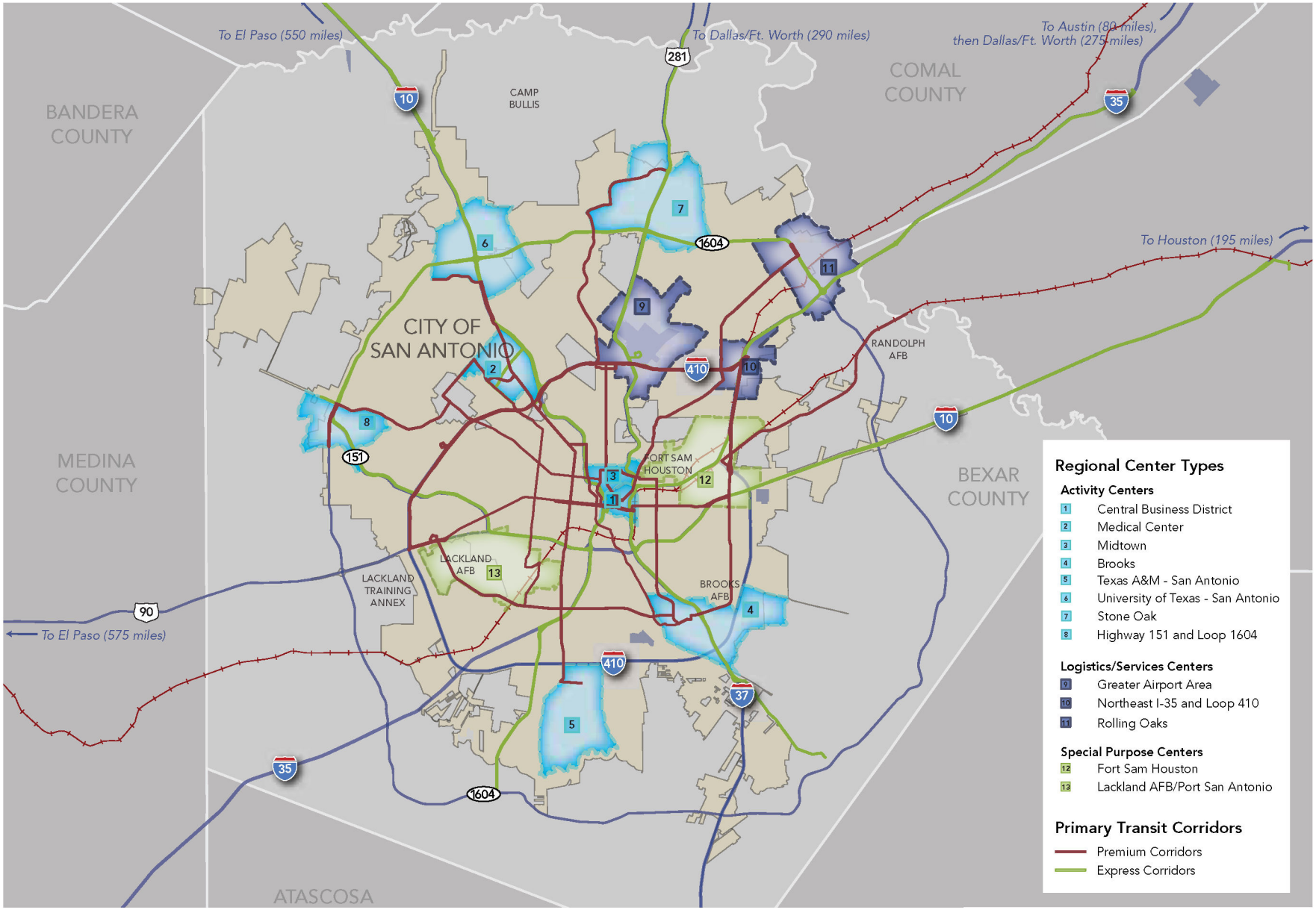
LOGISTICS/SERVICES CENTERS

These areas have superior connectivity for the movement of goods and people including air, freight/rail and roadway transportation. This positions them as launching points for the city's exports and imports. These centers have large, coordinated areas of single uses, and concentrated nodes of mixed-use, with more jobs than residents. They provide goods and service to support businesses and residents adjacent to the center.

SPECIAL PURPOSE CENTERS

These areas have large employers, institutions and/or concentrations of similar types of employment. These centers typically require or a barrier or buffer to separate their specialized activities from surrounding areas. They mostly contain primary employers and supportive services and amenities.

Regional Centers are one of the key building blocks of our city's future. In order to leverage their potential to help absorb San Antonio's projected growth we need a clear vision and strategic plan for each. These regional center plans need to refine each center's boundaries, identify areas of change and stability, and develop a detailed land use plan that prioritizes infrastructure, policy and program improvements. While these centers should promote higher-density, mixed-use development, not all areas within a regional center are recommended for this type of growth. For example, existing historic districts and neighborhood conservation districts are not recommended for higher-density development and should receive enhanced protection to prevent this. Our historic and conservation districts are some of our city's greatest assets and our development policies should protect them. Regional center plans must be respectful of these special areas when defining development opportunities. A more detailed framework for these regional center plans is provided in Chapter 17.



Regional Center Types