# DEMOGRAPHICS & LAND USE PROJECTIONS

## Southern Edwards Plateau Habitat Conservation Plan

September 10, 2010
Revised September 14, 2010

**Objective:** To provide reasonable scenarios for the magnitude and distribution of population, housing and land uses within the Region (Study Area) for use in the HCP

## Sources of Demographic Data

- US Bureau of the Census, Census of Population and Housing 2000
- Texas State Data Center (TSDC) Projections of Total Population; Population by Age & Ethnicity to year 2040 by County
- Woods & Poole Economics Projections of Total Population;
   Population by Age & Ethnicity to year 2040 by County
- Environmental Systems Research Institute Business Information Solutions (ESRI BIS)

Projections of Total Population; Estimates and Projections of Population by Age & Ethnicity for 2009 and 2014 by County and small areas (Census Tracts/Sectors)

## Sources of Housing Data

- US Bureau of the Census, Census of Population and Housing 2000
- Environmental Systems Research Institute
  Business Information Solutions (ESRI BIS)
  Projections of Total Population; Estimates and Projections of
  Population by Age & Ethnicity for 2009 and 2014 by County and
  small areas (Census Tracts/Sectors)
- County Appraisal Districts
- Surveys of active new home subdivisions by SA Research Corporation (2000-2009)

#### Sources of Land Use Data

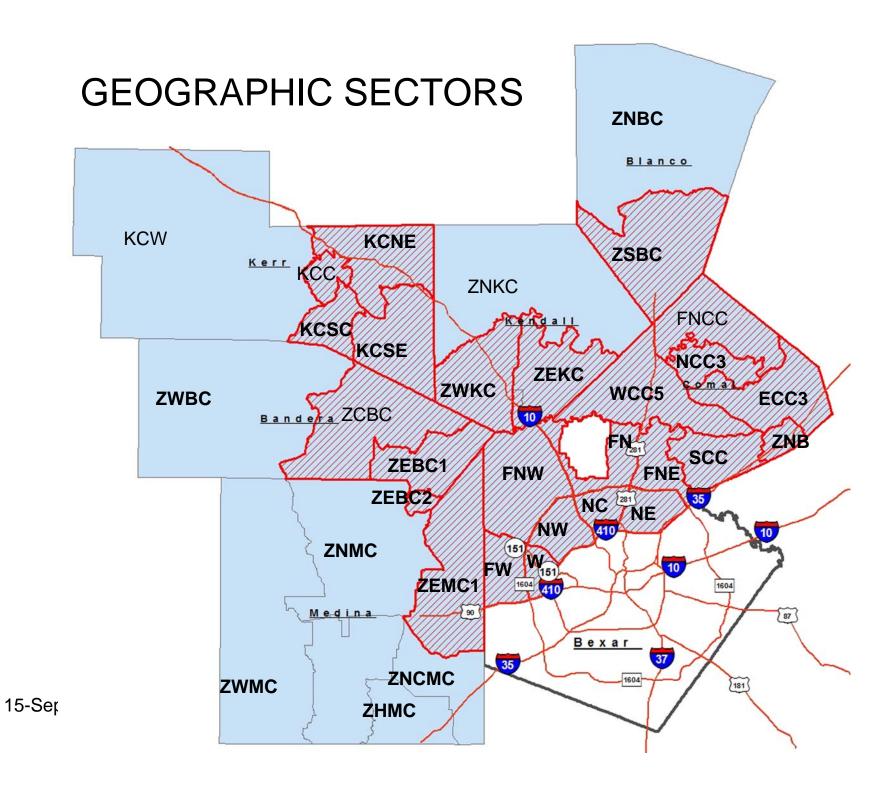
- Bandera County Appraisal District
- Bexar Appraisal District
- Blanco County Appraisal District
- Comal County Appraisal District
- Comal County Engineer (Subdivisions)
- Kendall County Appraisal District
- Kerr County Appraisal District
- Medina County Appraisal District

#### Other Sources of Data

- Federal Emergency Management Agency (FEMA)
- United States Geological Survey (USGS)
- Bulverde Water Master Plan (Pate Engineers)
- Loomis Partners

### **Factors Considered**

- Population (Total, Group Quarters, Pop/HH, Households, Occupancy Rate)
- Housing (Total Housing Units, Single Family (SF)
   Housing Units, Percent SF, SF Units/Acre; Non-Single
   Family Housing Units, Non-SF Units/Acre)
- Major Land Uses (Single Family, Non-Single Family, Commercial, Exempt, Other, Rights-of-Way, Vacant Platted, Vacant Unplatted, Floodplain, Steep Slopes)
- Sectors (34 total sectors, 24 pre-determined "growth" sectors; 14 actual growth sectors)



## Major Assumptions

- Single Family land use, as the dominant land use representing almost 52% of developed land in 2009, is the driver of land absorption over time.
- Generally, growth in non-residential land uses are a function of single family housing absorption.
- In the population, housing and land use model some factor relationships (e.g. Pop/HH, Occ Rates, Pct SF) are held constant over the planning period.
- Assigned "Optimum" densities (residential units/acre, non-residential acres added per 100 single family units added) are assumed for growth in each type of land use.
- Rights-of-Way can be estimated as a percent of developed land in each Sector (10% in rural sectors to 20% in urban sectors)

### Major Assumptions, cont'd

- As future land is absorbed, vacant platted land will be the first to be absorbed, followed by vacant unplatted.
- In very low density development, since property can be considered developed w/very low densities, defined "undevelopable" land is not necessarily a deterrent.
- The percentage of developed land is the total of identified developed land divided by total developed plus total vacant available land.
- Development Capacity of single family housing units of a given sector is assumed to be a product of assigned "optimum" single family density and total vacant available land as of 2009, plus the number of existing single family housing units in 2009.

### Major Assumptions, Cont'd

- Projections of population for a given small area (sector) is made by ESRI BIS without regard to the actual capacity of the sector to accommodate the population growth.
- When population growth is related to single family absorption, the small area becomes finite and demand for single family units that exceeds the sector's capacity will continue in the direction of growth and demand will "shift" to other sectors in the path of growth.
- Demand for more than 157,000 single family units was shifted to other sectors in the preliminary projection scenarios. Almost 116,000 of single family demand was shifted to OUTSIDE of the Study Area.

#### **FINDINGS**

#### Demographic Profile of the Region: 2009

•	Total F	Population	in full	7 c	counties =	1,918,757
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•	Total Po	pulation	in Study	/ Area	1,001,966
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•	<b>Population</b>	w/Hispanic Origin	43.4%
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#### **FINDINGS**

#### Demographic Profile of the Region: 2040

•	Total Population in full 7 counties	3,040,161
•	Total Population in Study Area	2,068,006

•	Population w/Hispanic Origin	56.4%
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- Black Population 4.6%
- Median Age (est. from age groups)
   35.8 yrs
- Mean (Not Median) Household Income \$92,842
- Per Capita Income \$32,270

#### **REGIONAL DEMOGRAPHICS: 2009**

	Region	Bandera	Bexar*	Blanco	Comal	Kendall	Kerr	Medina
Population 7 Counties	1918757	21221	1645301	9504	115226	34292	48053	45160
Population Study Area	1001966	21221	728510	9504	115226	34292	48053	45160
Hispanic Origin	43.4%	18.3%	48.3%	20.6%	29.5%	0.2%	25.4%	54.4%
Black	4.2%	0.3%	5.3%	0.8%	1.0%	0.4%	1.9%	2.1%
Age 18 +	74.8%	78.1%	74.0%	77.7%	76.7%	75.8%	80.0%	73.2%
Age 65 +	11.0%	17.1%	8.8%	16.9%	15.3%	15.0%	24.8%	12.7%
Pop/HH	2.67	2.52	2.68	2.52	2.67	2.73	2.35	2.92
Households	371982	8359	270508	3696	42623	12368	19590	14838
Mean HH Income	\$69,179	\$56,771	\$70,086	\$56,827	\$71,682	\$79,898	\$56,508	\$52,750
Per Capita Income	\$28,681	\$22,489	\$30,247	\$22,358	\$22,669	\$29,023	\$23,630	\$17,916
* SEP HCP Study inclu								

Note the difference between the 7-County Region and the Study is shown in the Bexar County population difference of 916,791.

#### REGIONAL HOUSING

- The Region currently has 439,565 Total Housing Units
- Since 2000 the Region has experienced an average increase of 14,558 total housing units annually (2.7%)
- Single Family Absorption averaged 10,876 new units annually from 2000-2009 (2.8%)
- Owner-Occupied housing has increased from 51% in 2000 to 57% in 2009
- The estimated median value of Owner-Occupied housing in 2009 is \$130,843 compared to \$91,783 in 2000.

## REGIONAL POPULATION AND HOUSING PROJECTIONS: 2010-2040

							Annl Pct
							Change
	2000	2009	2010	2020	2030	2040	2010-2040
SEP Region Population	746350	1001933	1084632	1602818	1831617	2068006	2.9%
Households	284370	371982	393267	564968	645073	728344	2.7%
Total Housing Units	308547	439565	449160	617062	703592	800174	2.5%
Single Family Housing Units	198479	296361	310095	437184	508250	583459	2.8%
Source: PHLUM							

## REGIONAL LAND USE AND ABSORPTION

#### Land Uses 2009

- Single Family land use currently represents 51.6% of total developed land, including estimated rights-of-way
- An estimated 156,386 acres were absorbed between 2000 and 2009, an average of 17,376 acres annually.

#### Land Use Characteristics

- The Region covers 3,638,726 acres, or 5,685.5 square miles of which almost 87% is estimated to be undeveloped.
- An estimated 11.4% are considered to be undevelopable in the 100-year floodplain.
- In addition, an estimated 15.8% are steep slopes of greater than 15%, which is typically considered to be undevelopable

#### INCOME AND ECONOMIC GROWTH

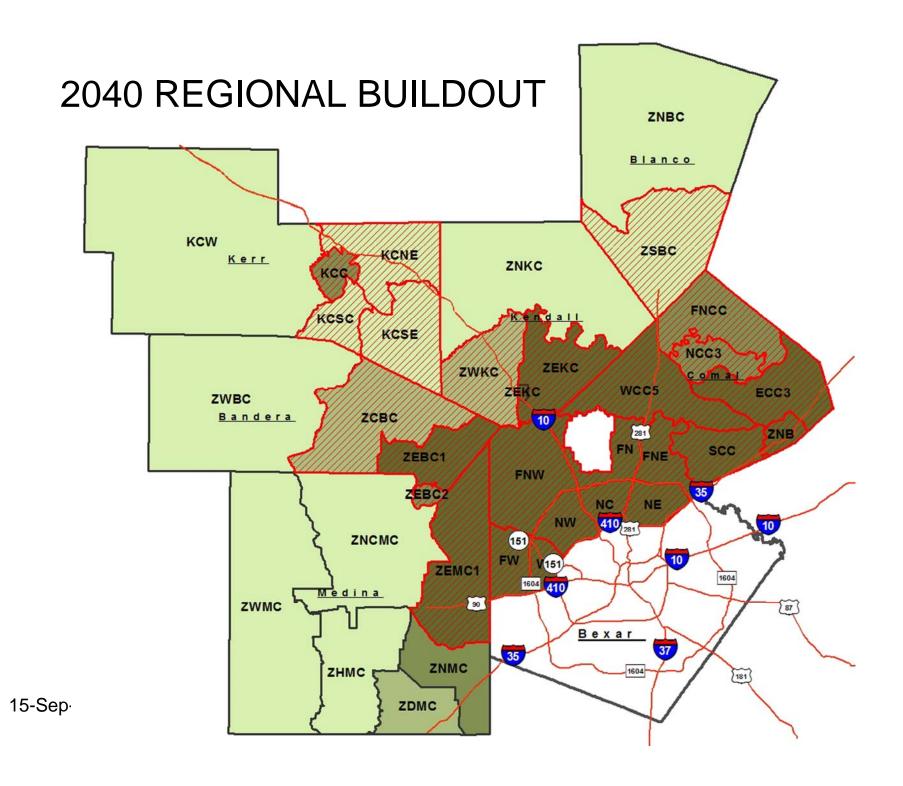
- Total employment in the 7-county Region is estimated to be 795,743 in 2010, an increase of less than 1% since 2000.
- Currently, Median Household Income is estimated to be \$50,556 compared to Mean HH Income of \$69,179.
- Total 2010 earnings within the Region, according to Woods & Poole Economics is \$50,311,530,000, up from \$35,698,000,000 in 2000
- Retail sales are estimated to be \$33,878,000,000 in 2010 and \$28,763,000,000 in 2000.
- The Gross Regional Product in the Region is estimated to be \$76,233,560,000 in 2010 and \$56,664,330,000 in 2000.

#### REGIONAL GROWTH SUMMARY

- Population increase in the Study Area of more than 1,066,000 over the planning period an average of 2.9%.
- More than 360,609 new housing units will be added between 2009 and 2040.
- Developed Land will increase by a total of 339,625 acres to a total of 827,177 acres by 2040.
- By 2040 2,813,423 acres will remain undeveloped in the Study Area, representing 77.5% of total land.
- Total earnings are projected to increase by an average of 3.6% over the next 30 years.
- Total employment is projected to increase by an average of 1.9% annually from 2010 to 2040.

#### NOTES FROM CAC MEETING

- The unrealistic land absorption from decade to decade is attributed to far too aggressive demand projections for single family housing units for 2010-2020.
- Some of the assigned "optimum" densities will be increased for the 2040 capacity of sectors receiving shifted demand, such as WCC5, ZEBC1, ZEKC, ZEMC1 and will result in lower land absorption between 2030 and 2040 with no change in total single family housing units.
- The problem with population added vs housing units added on slide 18 (2<sup>nd</sup> bullet) was a typo that showed the wrong number of 79,000, when the actual number resulting from projections was 360,609 housing units added.



#### DRAFT PROPOSAL GENERAL CONSERVATION STRATEGY FOR THE SEP-HCP

The general conservation strategy establishes the goals and objectives of the conservation program, including both biological and community considerations. The BAT has made preliminary recommendations for species-specific biological goals and objectives for CAC consideration. However, the CAC is charged with considering a broader set of issues, including the social, political, and financial implications of the plan.

The draft proposal outlined below identifies some of the community-based goals and objectives that the CAC may want to consider as part of the general conservation strategy for the SEP-HCP, in addition to the species-specific biological goals and objectives.

- REGIONAL CONSERVATION: Design and implement a regional conservation program
  with a focus on habitat protection for the covered species and that supports the
  conservation of other regionally important natural resources.
  - a. Protect and manage <u>sensitive native habitats</u> for the golden-cheeked warbler, black-capped vireo, and other native species that depend on these habitats.
  - b. Protect and manage karst habitat, surface and subsurface drainage basins, and surface vegetative communities for sensitive karst organisms.
  - As part of this document, the proposed activities of CAC should contribute to recovery of the species.
  - d. Contribute to the protection of other important ecosystem functions, such as water quality and quantity in the Edward's Aquifer system, through <u>biologically</u> <u>significant</u> conservation actions for the covered species.
- 2. SUPPORT CAMP BULLIS: Support the military training mission at Camp Bullis by helping to alleviate local and regional endangered species issues.
  - <u>Assist</u> ESA compliance on private lands in the vicinity of Camp Bullis by facilitating the incidental take permit process.
  - Seek conservation partners and prioritize opportunities to protect and manage endangered species habitat in the vicinity of Camp Bullis.
- STAKEHOLDER INVOLVEMENT: Seek input and buy-in from a wide spectrum of stakeholders during development and ongoing implementation of the SEP-HCP, including <u>scientists</u>, private landowners, business interests, environmental groups, government entities or agencies, and others.
  - Include a broad spectrum of stakeholder interests on SEP-HCP advisory committees and teams.
  - <u>Establish</u> advisory groups after permit issuance to provide feedback on plan implementation.
  - Enable and encourage formal, but flexible, partnerships with other jurisdictions in the Plan Area to cooperate on plan administration and implementation in regionally appropriate ways.
  - d. Share research results, monitoring data, and other planning information with the public to the extent practicable without compromising sensitive biological, personal, or property information.
- STREAMLINE PERMITTING: Facilitate Endangered Species Act compliance for nonfederal entities in the SEP-HCP Plan Area by streamlining the process for obtaining an incidental take permit.

**Deleted:** mature juniper-oak woodlands and oak savannas

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**Deleted:** Contribute to the recovery of federally listed species and the stabilization or improvement of the status of other rare species in the region

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Contribute significantly to endangered species recovery beyond the minimum required for ESA compliance.

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 a. Establish a voluntary and regionally (or locally) administered option for obtaining incidental take authorization for projects in the Plan Area that is clear, certain, timely, and cost-effective.

b. Ensure that mitigation ratios and participation fees are based on sound biological rationale, consistent with the level of impact to the species.

c. Provide guidance to potential plan participants on avoiding or minimizing impacts to the species addressed in the plan to reduce mitigation obligations where practicable and appropriate. **Deleted:**, and fairly applied with respect to other similar permitting actions for the covered species

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- LOCALLY APPROPRIATE AND COST-EFFECTIVE IMPLEMENTATION: Achieve regional conservation of endangered species using locally appropriate and cost-effective tools and approaches.
  - Understand local community and landowner concerns regarding endangered species habitat protection, and prioritize the use of compatible land protection tools to build the SEP-HCP preserve system.
  - Seek voluntary, willing conservation partners for endangered species habitat protection and management.
  - c. Phase the implementation of the Plan to provide opportunities to review progress and adapt the conservation program to changing needs and circumstances over time.
  - Minimize administrative costs associated with Plan implementation through the use of efficient and effective practices.
- 6. LEVERAGE RESOURCES: Coordinate conservation planning for endangered species on a regional scale to take best advantage of available conservation opportunities.
  - Pool available conservation resources from Plan partners, participants, and other sources as available to achieve biologically significant, regional conservation of endangered species.
  - Leverage available conservation resources with other programs active in the Plan Area to maximize the regional benefits of past, present, and future conservation efforts or opportunities.
  - c. Compliment other conservation efforts in the region (such as aquifer protection initiatives, scenic and cultural preservation, and parkland acquisition programs) and seek to avoid competition with complementary programs for conservation resources.

In addition to this general conservation strategy, the biological goals and objectives will further define the specifics of the operating conservation program with respect to the species addressed in the plan, such as the size and configuration of the preserve system.

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