Senate Bill One Phase Two

Region C Water Planning Group Meeting

October 14, 2002

REGION C
Water Planning for North Texas

Topics

- RCWPG Website Demo
- Draft Schedule
- Update on Population Surveys
- Update on Water Needs Projections
- Population Densities
- Public Participation Program
- Media Kits
- Quarterly Newsletter
- SB1 Phase 2 Brochure
- Press Release
- Summaries of State Conservation Reports

Draft Schedule

- Draft schedule available
- Key Dates:
  - January 1, 2003 – revised population projections due to TWDB
  - March 7, 2003 – revised water needs projections due to TWDB
  - June 1, 2005 – Initially Prepared Plans (IPP) due to TWDB
  - January 5, 2007 – adopted regional plans due to TWDB

Region C Population Projection Survey Update

- 296 surveys sent out to Region C WUGs on September 10, 2002
- Survey response due on September 30, 2002
- 132 surveys have been returned (44%)
- 57% stated populations are reasonable.
- 11% stated populations are high
- 23% stated populations are low

Summary of Survey Comments

- In General:
  - Highly developed urban areas felt projections were high.
  - Rural or less developed areas felt projections were low
    - Most often the sentiment of areas on the edge of development
    - More distant rural areas seem to feel projections were ok
- Background data used by TWDB on the limits and population for WSC's seem to have errors.
- TWDB tables for WUG's in split regions have errors.

Chronology of Review Process

- TWDB Draft County Total Populations Out for Informal Comment (Late Feb. 2002)
- Region C Made Informal Comments to TWDB (April 2002)
- TWDB Draft County Sub Population Out for Informal Comment (Late May 2002)
- Region C Made Informal Comments to TWDB (July 2002)
- TWDB Draft Projections were out for Formal Review (Aug. 2002)
- Formal Comment period currently being conducted.

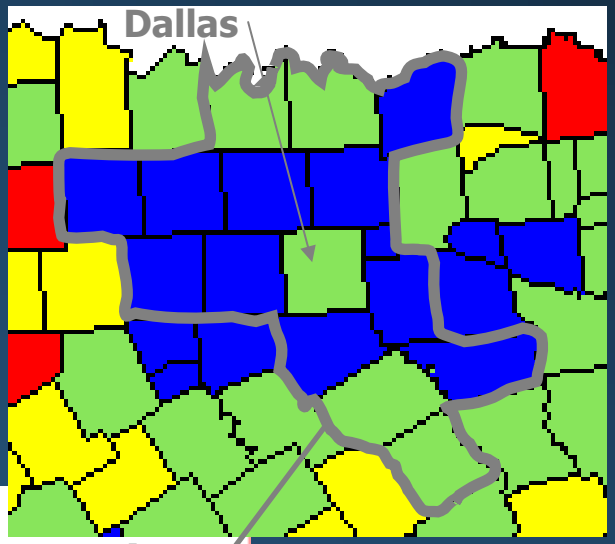
Rules for Formal Comment

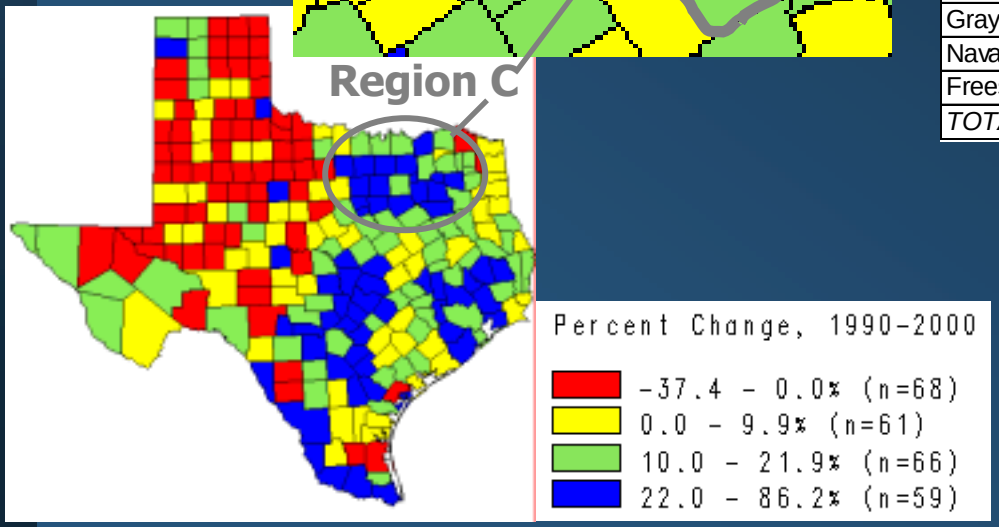
- Any population adjustments must go through Region C Water Planning Group
- Population Adjustment Comments due to TWDB January 2003
- Examples of supporting data includes:
  - General Documentation of undercount in 2000 census.
  - Documentation of higher migration into county over past several years than experienced between 1990 and 2000.
  - Changes in city boundaries, including annexation.
  - Boundary Build-outs.

Water Needs Projections

- TWDB hopes to have water needs projections ready at the beginning of November
- TWDB due date of March 7, 2003 has not been adjusted

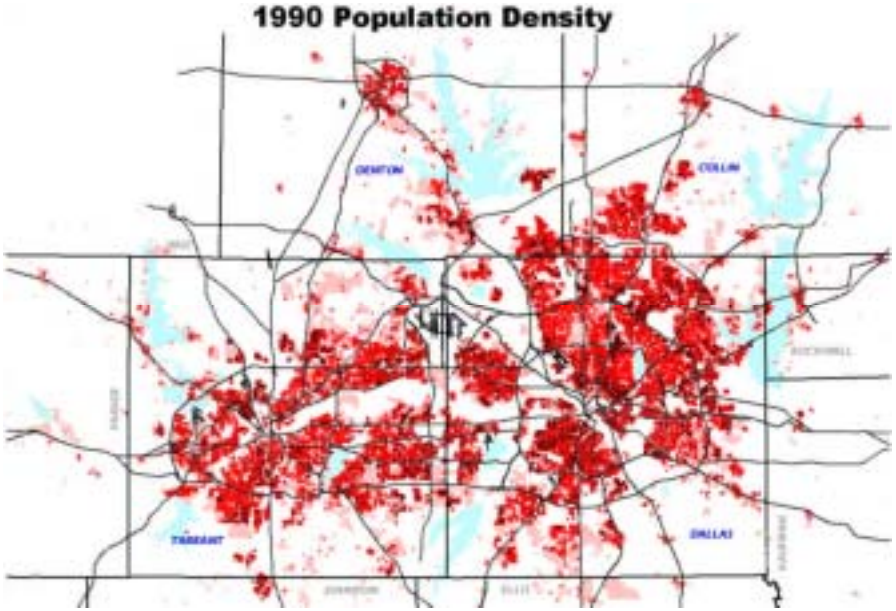
Texas Counties 1990-2000 Percent Population Change

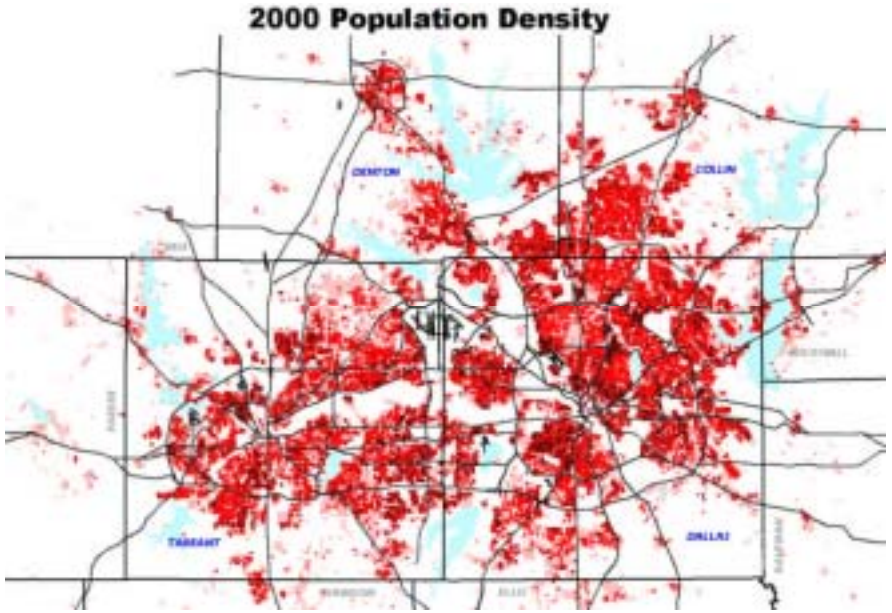




COUNTY	1990	2000	1990-2000 % Change	2060 Projections
Collin	264,036	491,675	86.2%	2,250,167
Henderson	42,034	73,227	74.2%	114,810
Rockwall	25,604	43,080	68.3%	198,461
Denton	273,525	432,976	58.3%	1,905,072
Wise	34,679	48,793	40.7%	128,535
Parker	64,785	88,495	36.6%	200,897
Kaufman	52,220	71,313	36.6%	267,118
Ellis	85,167	111,360	30.8%	315,932
Fannin	24,804	31,242	26.0%	42,571
Jack	6,981	8,763	25.5%	9,467
Tarrant	1,170,103	1,446,219	23.6%	3,173,315
Dallas	1,852,810	2,218,899	19.8%	4,200,000
Cooke	30,777	36,363	18.1%	45,260
Grayson	95,021	110,595	16.4%	135,686
Navarro	39,926	45,124	13.0%	81,990
Freestone	15,818	17,867	13.0%	20,089
TOTAL	*4,078,290*	*5,275,991*	*29.4%*	*13,089,370*

DFW Metroplex Population Density 1990-2000

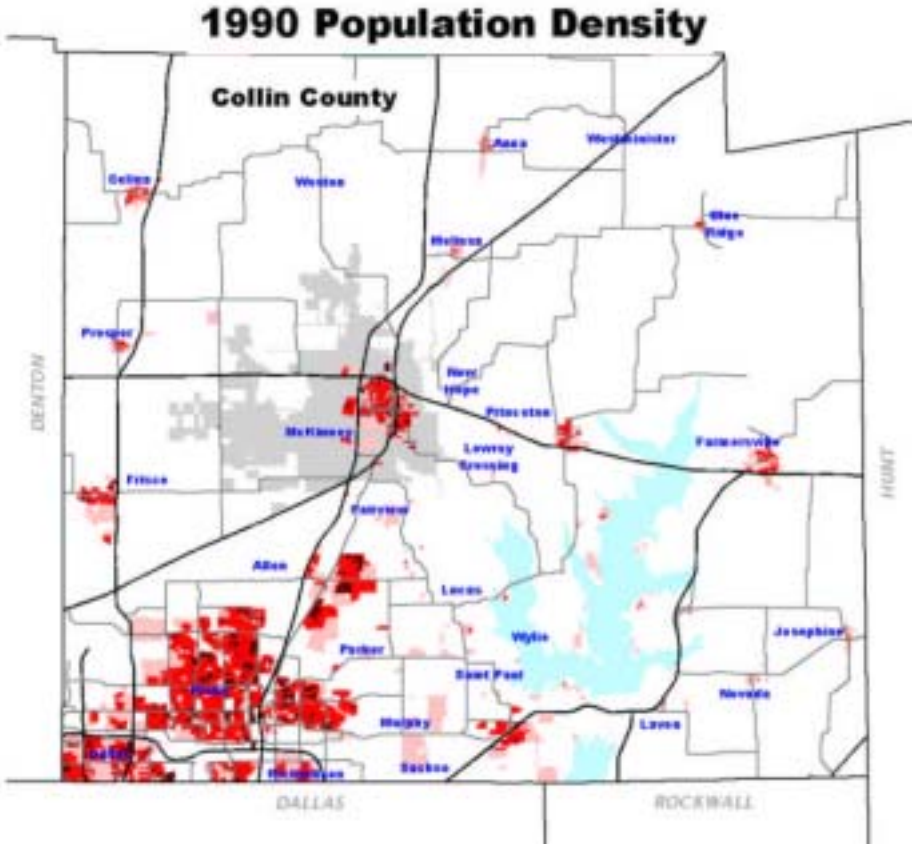


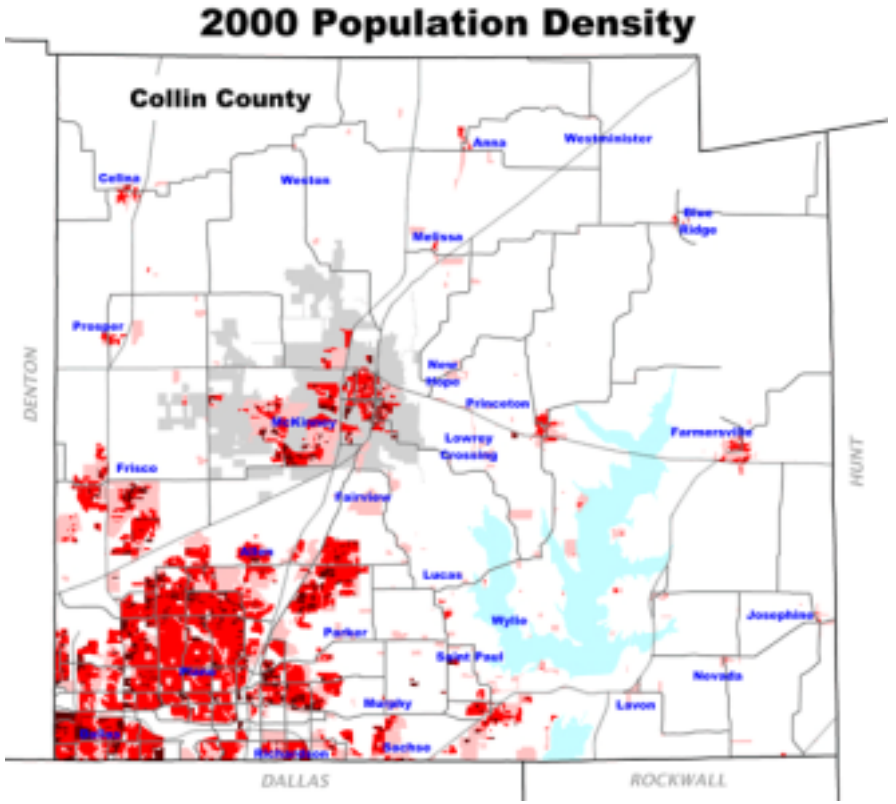


Persons Per Acre
- Less than 1
- Low
- Moderate
- High

North Central Texas Council of Governments
Research & Information Services
http://census.dfwinfo.com
(817) 695-9103
Source: 1990 & 2000 US Census, NCTCOG

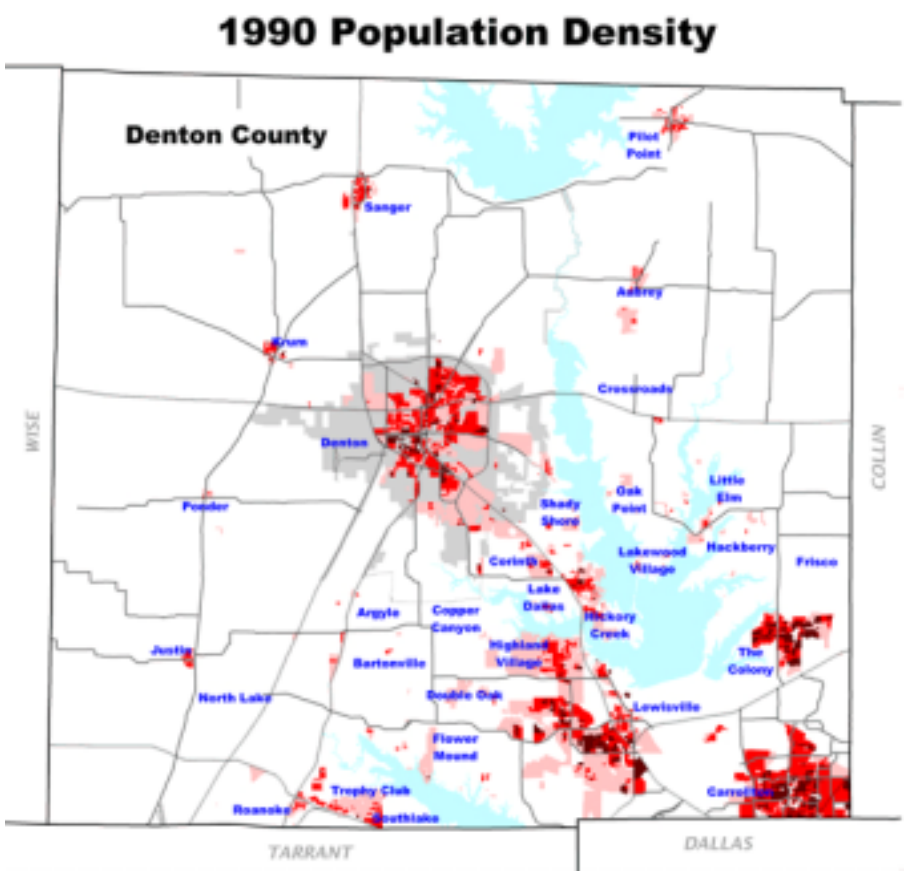
Collin County Population Density Changes

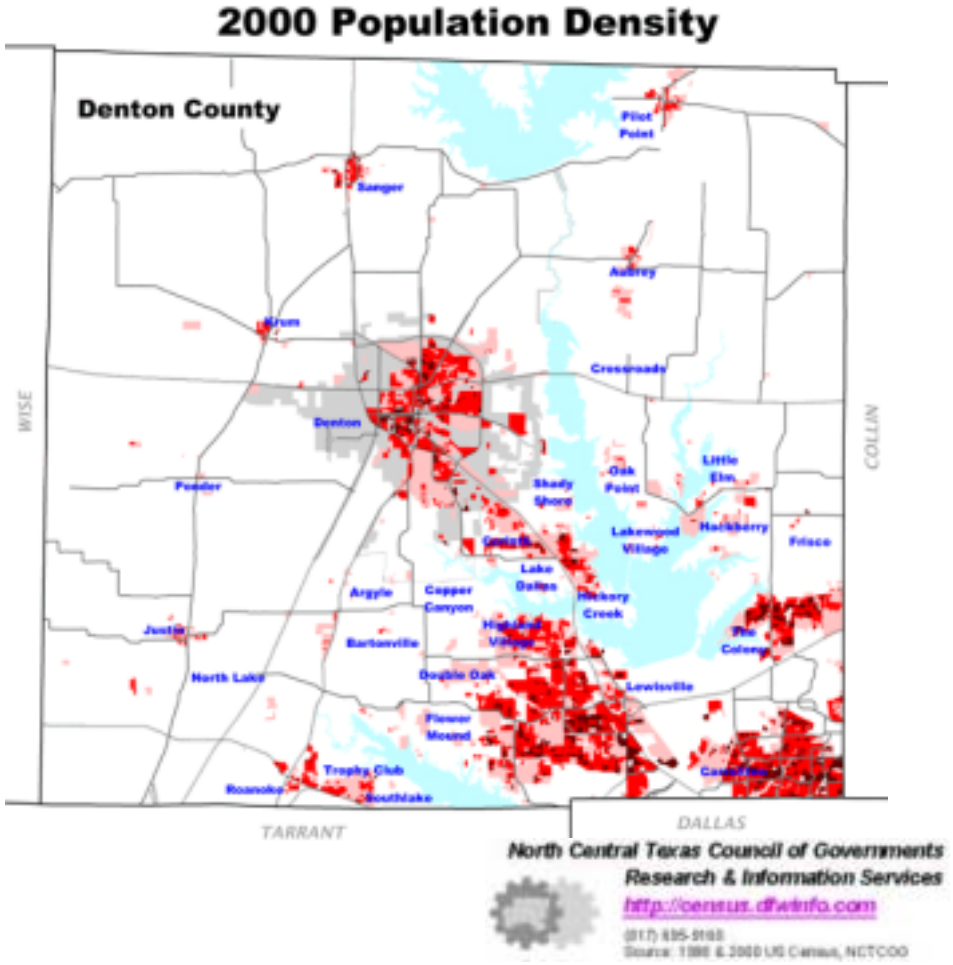




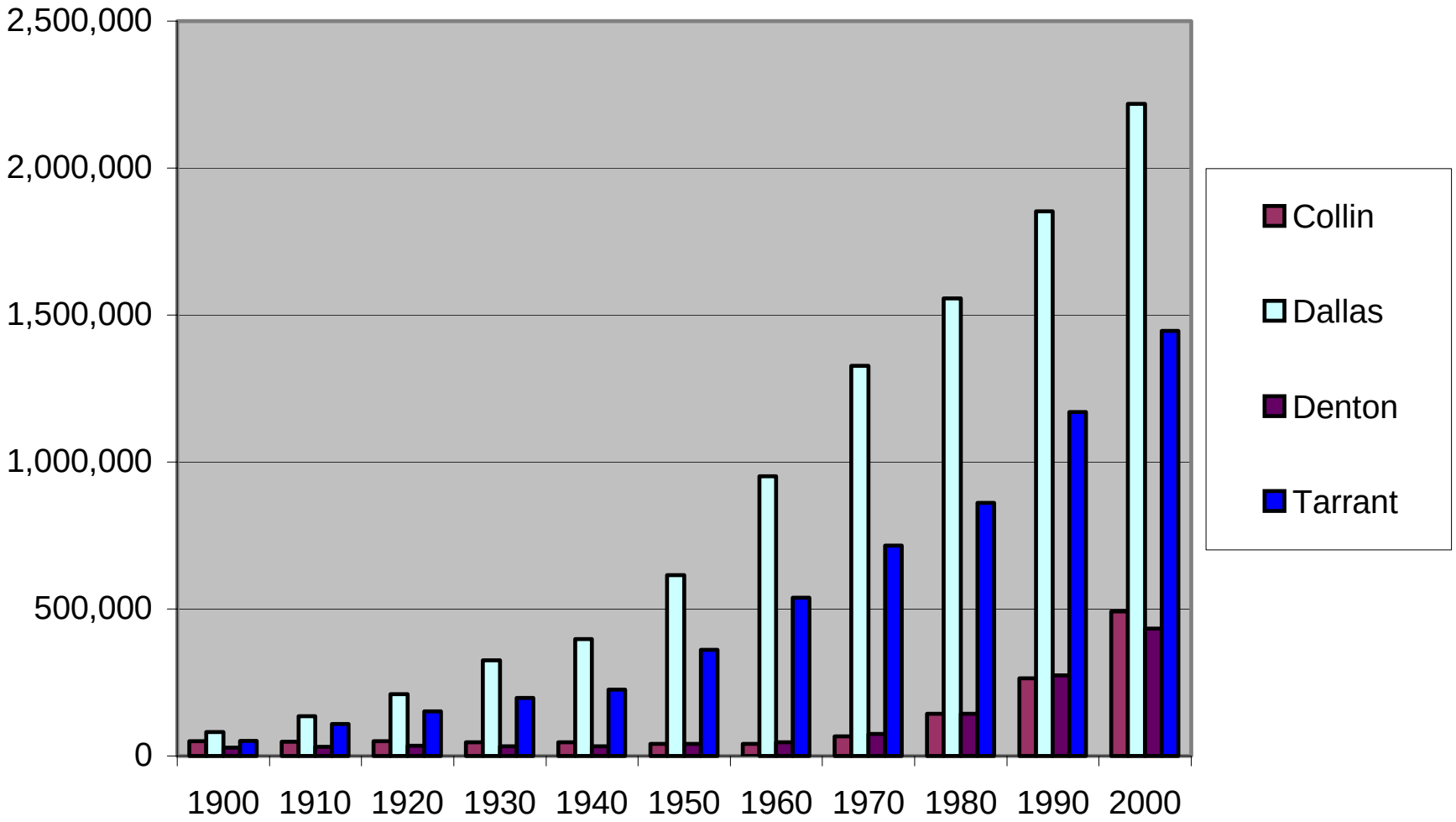
North Central Texas Council of Governments
Research & Information Services
http://census.dfwinfo.com

Denton County Population Density Changes





Historical Populations



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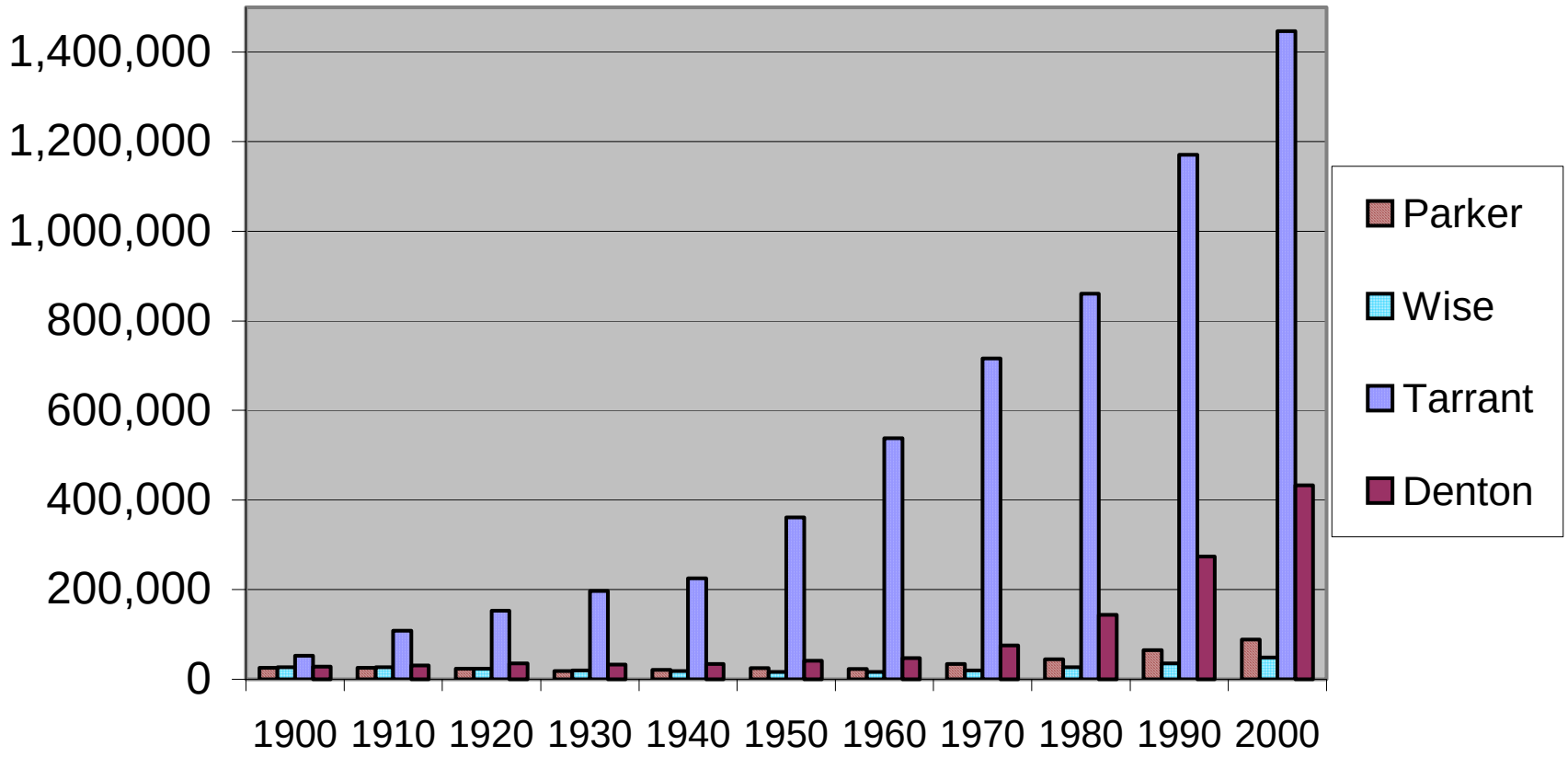

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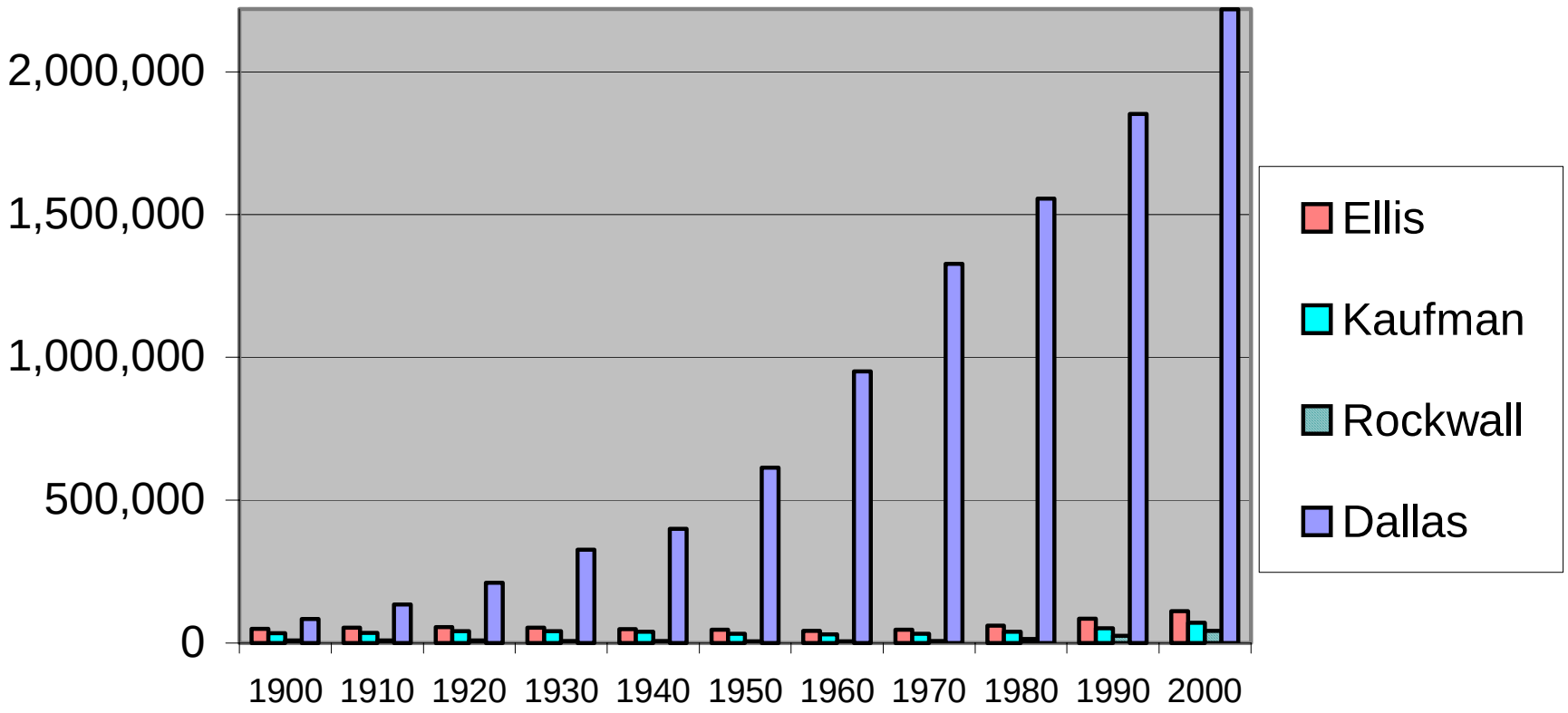

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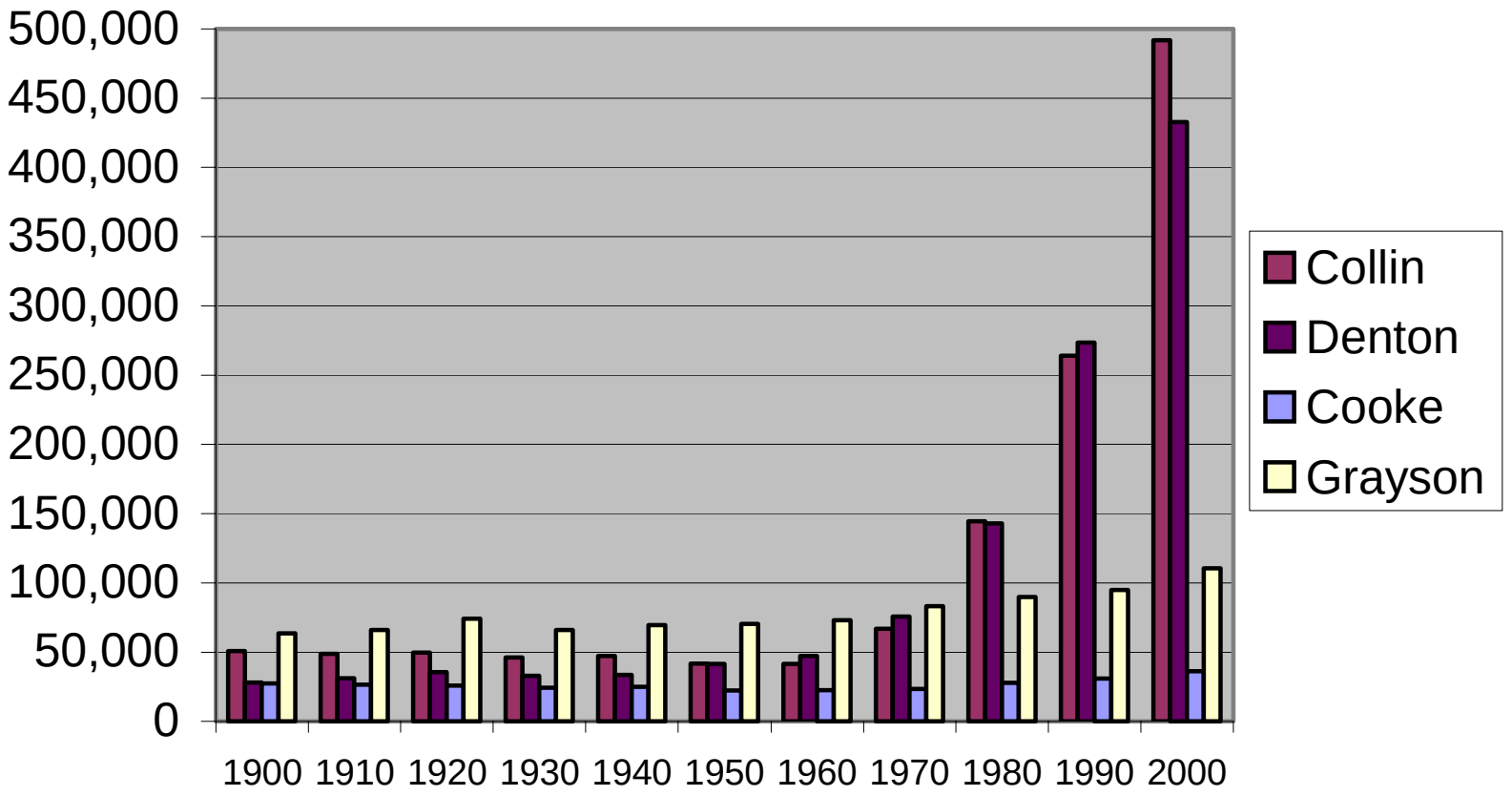
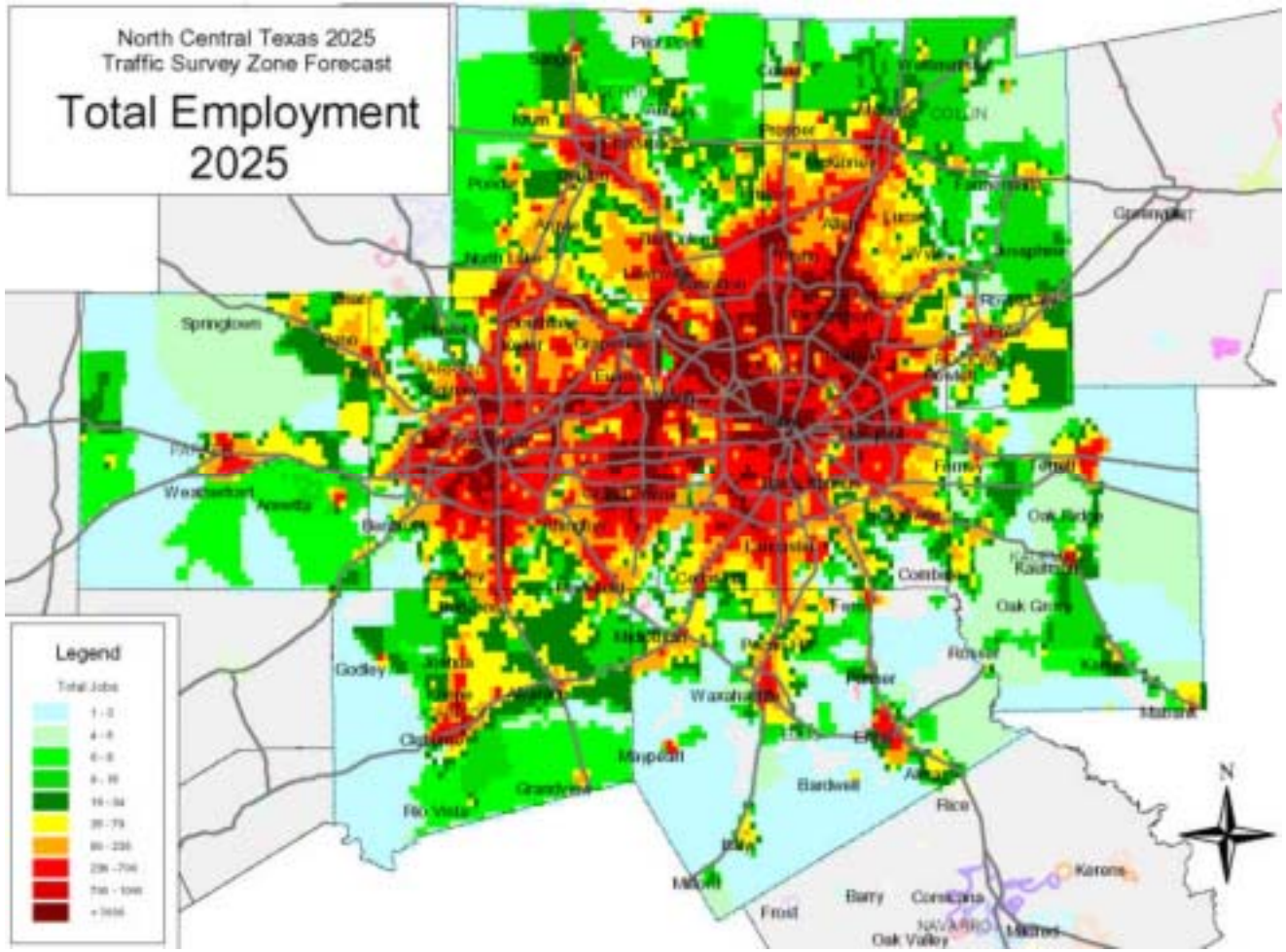
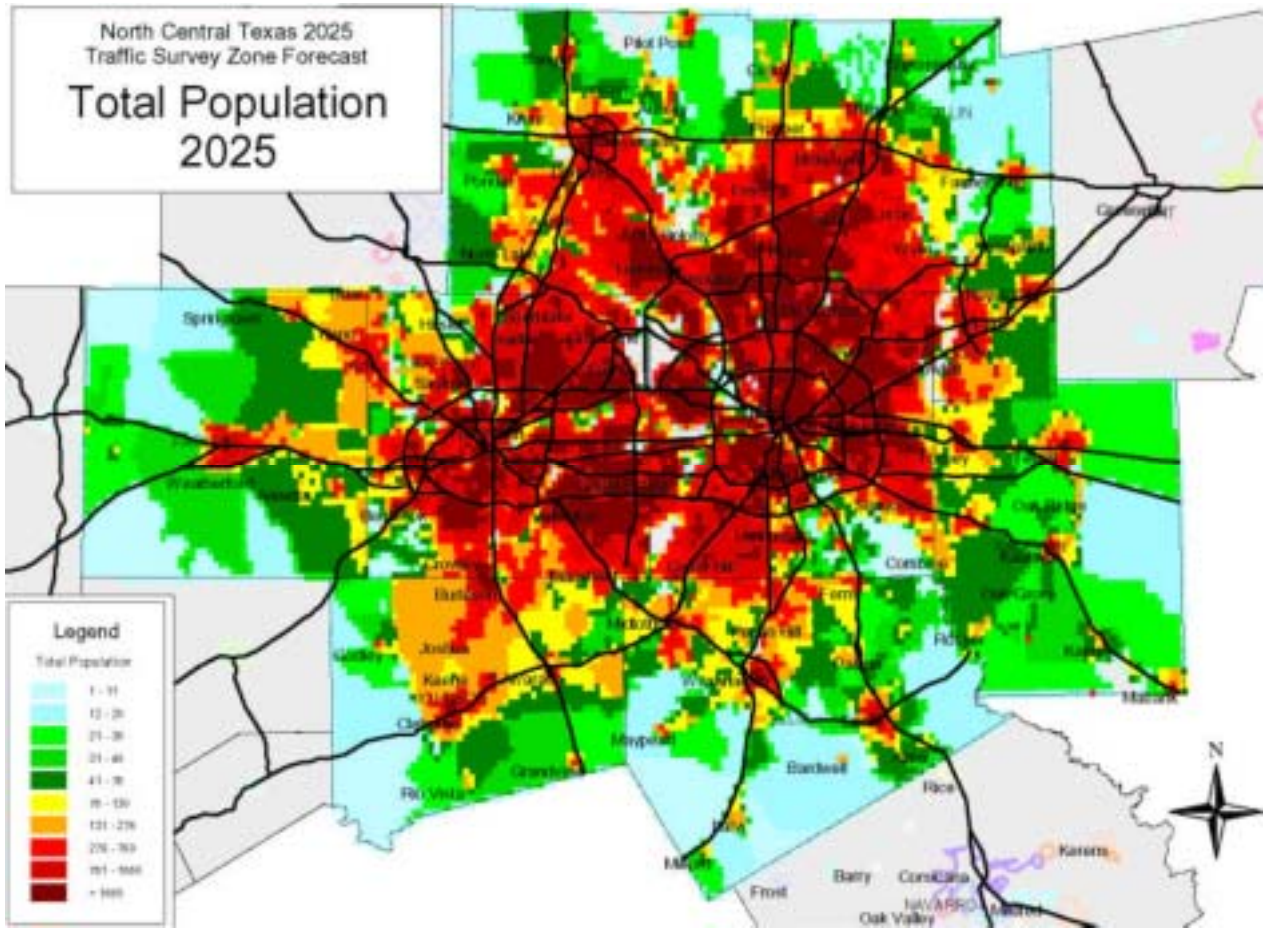


DFW Metroplex 2025 Employment Projections



DFW Metroplex 2025 Population Projections



Public Participation Plan – "Water Planning Is *Not* A Dry Topic"

Region C Water Planning Group

October 14, 2002

We Know Water Planning Is Critical

- Texas' population is projected to hit 40 million by 2050 (currently 21 million)
- Current water supplies would meet municipal water needs for only half of the projected 2050 population if there were a drought
- Region C includes 12 of the 20 fastest-growing communities in Texas
- Without additional supplies, Region C's 2050 population, employment and income would be significantly, adversely affected

Many *Media* Know It's Critical

Despite Recent Floods, Texans Fight Over Rights to Precious Water

By JIM YARDLEY

NE Texas to Dallas: Don't take water

Opposition rises to proposed reservoir to supply urban areas

By RANDY LEE LOFTIS

Nation

War over water splits California cities, farms

Federal officials threaten to cut the state's use of Colorado River water to its legal limit, and the region is scrambling to make up for the potential loss

Hopefuls' visions a mix of oil, water

Patterson wants to boost fuel production; Bernsen floating plans

By GEORGE KUEMPEL

TEXAS ELECTIONS

Land commissioner

AUSTIN — Oil and water are pet issues that contrast the visions of the two leading candidates for state land commissioner.

Republican Jerry Patterson, a former state senator from Pasadena making a second run for the office, is promoting a plan to boost oil and gas production on state lands to raise more money for public schools.

with a plan that is fair and equitable to everybody," he said.

The candidates have been touting the proposals as their most creative ideas in the race for land commissioner, whose primary job is managing the 700,000 surface acres and 12.5 million acres of mineral rights in the Permanent School Fund.

Income from oil and gas and surface leases on those lands produced $2.4 billion for public schools for the current school year.

The dubious state of Texas' water

Too many Texans take our precious resource for granted. They shouldn't.

Jack Z. Smith

In South Texas, the Rio Grande is periodically bone-dry at its mouth at Boca Chica, where its waters once routinely flowed into the Gulf of Mexico.

The storied waterway that divides Texas and Mexico has been heavily tapped and radically altered by human use. As a result, it has become "more a managed irrigation ditch" than a river, laments Larry McKinney, senior director for aquatic resources for the Texas Parks and Wildlife Department.

In North Texas, a prolonged population explosion has triggered plans to build the huge Marvin Nichols Reservoir proposed for a site 100 miles from Fort Worth in Northeast Texas. The water would be piped to the Metroplex to serve Fort Worth, Arlington, Dallas and other cities at a total cost of around $3.1 billion.

The reservoir would inundate wildlife-rich, ecologically important Sulphur River bottomlands that host mature hardwood forests. Although water officials in North Texas insist that the reservoir will be needed to meet the region's growing water needs, the project faces diverse opposition

Our Goal

To ensure that all audiences in Region C understand how important water planning is – and that their input is welcome – so they will participate in the process

Communications Objectives

- To communicate with target audiences at each phase of the planning process, offering opportunity for participation
- To communicate with target audiences once initial planning is done, to solicit public feedback
- To ensure that all communications and requests for information are acknowledged in a timely fashion

Key Messages

- The Senate Bill 2 planning process has commenced
- Participation by all constituents is encouraged because this is a critical issue
- The end result will be a positive plan for Texas' water needs into the next millennium

Challenges to Overcome

- Lack of awareness of planning process and of the RCWPG's existence
- Competition for RCWPG's communications to be perceived as important and time-sensitive
- Perception that the plan is already completed, so participation now is moot

Target Audiences

- Counties and cities within Region C
- Special or general law districts or river authorities
- Retail public utilities serving the region or getting water from the region
- Water rights holders
- Media outlets covering the region
- General public and all water consumers
- North Texas county extension services
- Media and public in affected areas outside Region C (including Region D)

Materials

- Media kit
- Press releases on public meetings, hearings and other Region C news
- Op-ed articles and feature stories
- Public service announcements
- Newsletters and e-newsletters
- Web site
- Tabletop display
- Speaking engagement documentation
- Video presentation, if budget permits

Communications Tactics

(to communicate throughout the planning process)

- Distribute newsletter and e-newsletter quarterly
- Communicate with COG and provide info for COG publications
- Put press releases on wire and send to media regarding planning process and milestones
- Notify media about public meetings and hearings
- Develop and place op-ed articles and feature stories
- Translate press kit materials into Spanish and provide to Hispanic media

Communications Tactics

(to communicate throughout the planning process)

- Conduct media orientation session prior to a RCWPG meeting
- Distribute press kits to key media at critical intervals
- Meet with media editorial boards
- Contact public TV/radio and cable access for public affairs program opportunities
- Document speaking engagements by RCWPG members; identify presentation opportunities
- Develop a dedicated Region C Web site and keep updated

Communications Tactics

(to communicate throughout the planning process)

- Develop a videotape presentation, if budget permits, as well as tabletop display for presentations
- Create a symbolic Region C spokesfigure to represent the planning process; schedule appearances before school groups and incorporate figure into all materials
- Develop public service announcements and secure placement in area media

Communications Tactics

(once Initially Prepared Plan is written)

- Hold public hearing and a series of public meetings to solicit feedback
- Notify the public of hearing and meetings via the newsletter, e-newsletter, mailing of proposal to key audiences, and press release
- Place proposal in county clerks' offices, public libraries, other public venues
- Develop op-ed articles and place feature stories explaining the plan and its significance
- Update the Web site; add plan and information on hearing/meetings

Communications Tactics

(once Initially Prepared Plan is written)

- Identify speaking opportunities before civic groups, key audiences, etc.
- Videotape public hearing and meetings for distribution to key media, audiences
- Provide Spanish-language materials to Hispanic media
- Involve media editorial boards, public TV/radio, cable access programs, and other media in effort to generate maximum public awareness

Communications Tactics

(to ensure that all communications and queries are acknowledged in a timely manner)

- Utilize the Web site to solicit feedback and questions, and develop system for tracking follow-up to all comments and queries
- Develop a system to track follow-up to calls, e-mails and comments sent to RCWPG members or consultants
- Employ the newsletter/e-newsletter to keep concerned audiences informed
- Track participation at meetings, hearings and speaking engagements through sign-up sheets, and add visitors to distribution list for mailings

Materials Review and Final Discussion Topics

- Videotape to use at public presentations
- First quarterly newsletter
  - Timing
  - Topics
- Public presentation forms and feedback forms
- Press release on water needs surveys
- Press release on all RCWPG meetings
- Media kits
  - Include RCWPG bulletin
  - Include press releases to date

Questions and Answers

Conservation – Summary of Statewide Efforts

- Texas Commission on Environmental Quality (TCEQ) (formerly TNRCC) – *Water Conservation Survey, 2002*
- Texas Water Development Board (TWDB) – *Quantifying the Effectiveness of Various Water Conservation Techniques in Texas, 2002*

TCEQ Water Conservation Survey

- Surveyed over 500 entities that have municipal water rights of more than 1,000 acre-feet per year OR that have obtained financial assistance from TWDB
- 378 surveys were completed and returned
- Observations based on the 378 responses
- Survey is located at the following web address:

  http://www.tnrcc.state.tx.us/permitting/waterperm/wrpa/results.pdf

TCEQ Water Conservation Survey Effectiveness

- 93% asserted that conservation plans were effective, although 27% noted they do not monitor the effectiveness of the programs.

TCEQ Water Conservation Survey Effectiveness

- Activities thought to be beneficial to ensuring an effective program:
  - 68% enforcement of water rate structure
  - 55% adoption of ordinance and/or associated penalties
  - 42% no taps to customers who do not meet conservation plumbing code
  - 26% wholesaler makes plan contractual requirement

TCEQ Water Conservation Survey Effectiveness

- Resources that would be beneficial to ensure an effective program:
  - 66% grant funding for facility improvements that will result in conservation
  - 58% grant funding for conservation program
  - 58% state sponsored media campaign
  - 41% state sponsored assistance program

TCEQ Water Conservation Survey Goals

- Only 12% identified a quantifiable water conservation goal with a time frame for achieving the goal.
- Conservation Methods Used:
  - 84% public education
  - 81% meter testing and replacement program
  - 55% increasing block water rate
  - 55% leak detection program
  - 46% conservation plumbing code
  - 41% publicity of Xeriscape program

TCEQ Water Conservation Survey Goals

- Methods (continued)
  - 29% plumbing fixture retrofit program
  - 27% water reuse program
  - 22% seasonal daytime restrictions on landscape irrigation

TCEQ Water Conservation Survey Water Loss & Accountability

- 92% calculate water loss
- Methods to reduce water loss:
  - 89% visual inspection
  - 84% meter testing and replacement
  - 71% account for unmetered water used (flushing & fire fighting)
  - 50% leak detection program

TCEQ Water Conservation Survey Water Rate Structure

- Water rate structures include:
  - 58% increasing block
  - 32% single block
  - 4% fixed or flat
  - 2% decreasing block

TCEQ Water Conservation Survey Public Education Programs

- Public education programs include:
  - 71% information for new customers
  - 55% mailouts
  - 46% bill inserts
  - 41% public service announcements
  - 42% school programs
  - 37% newsletters

TWDB Conservation Study

- Assumptions based on “realistic scenarios and water utility experiences”
- Assumptions
  - Maximum participation rates
  - Estimated costs
  - Projected savings
  - Projected lifetime

TWDB Conservation Study

- Conservation Programs:
  - Toilet retrofit
  - Showerhead and aerator kits
  - Clothes washer rebate
  - Irrigation audits for high users
  - Rainwater harvesting
  - Rain barrels

TWDB Conservation Study

- Cost per Acre-Foot of Water (Rural)

Method	Cost
MF Showerheads and Aerators	$61
SF Showerheads and Aerators	$134
MF Toilet Retrofit	$329
MF Rainwater Harvesting	$382
MF Irrigation Audit	$393
SF Irrigation Audit-High User	$459
SF Toilet Retrofit	$468
SF Rainwater Harvesting	$541
MF Clothes Washer Rebate	$553
SF Rain Barrels	$900
SF Clothes Washer Rebate	$930

TWDB Conservation Study

- Cost per Acre-Foot of Water (Suburban)

Method	Cost
MF Showerheads and Aerators	$58
SF Showerheads and Aerators	$108
MF Toilet Retrofit	$311
SF Toilet Retrofit	$377
MF Rainwater Harvesting	$382
MF Irrigation Audit	$393
SF Irrigation Audit-High User	$459
SF Rainwater Harvesting	$541
MF Clothes Washer Rebate	$553
SF Clothes Washer Rebate	$750
SF Rain Barrels	$900

TWDB Conservation Study

- Cost per Acre-Foot of Water (Urban)

Method	Cost
MF Showerheads and Aerators	$63
SF Showerheads and Aerators	$116
MF Toilet Retrofit	$338
MF Rainwater Harvesting	$382
MF Irrigation Audit	$393
SF Toilet Retrofit	$403
SF Irrigation Audit-High User	$459
SF Rainwater Harvesting	$541
MF Clothes Washer Rebate	$553
SF Clothes Washer Rebate	$801
SF Rain Barrels	$900

TWDB Conservation Study

- Total estimated water savings in Region C is 64,816,029 gallons per day (72,603 acre-feet per year).

TWDB Conservation Study

- We will revisit this study in greater detail in a later meeting.
- We have questions that will we explore with the TWDB and report back to you.
- Participation rates seem surprisingly high.
- Same % participation assumed for all regions for all 3 types of land use.
- Report can be accessed at

  http://www.twdb.state.tx.us/assistance/conservation/gdsstudy.htm