

LATINO STUDENT IMPROVEMENTS ON THE TAAS EXAM

A Report of the Texas Educational Excellence Project

Texas A&M University

University of Texas-Pan American

Kenneth J. Meier
John Bohte
J. L. Polinard
Robert D. Wrinkle

Report 6. July 1999

For further information contact:

Kenneth J. Meier, Department of Political Science, Texas A&M University
409-845-4232 kmeier@polisci.tamu.edu

John Bohte, Department of Political Science, Texas A&M University,
409-845- 2327 johnny@polisci.tamu.edu

J. L. Polinard, Department of Political Science, University of Texas-Pan American
956-381-3341 Polinard@panam.edu

Robert D. Wrinkle, Department of Political Science, University of Texas-Pan
American, 956-381-3341 rdwe116@panam1.panam.edu

See the Texas Educational Excellence Project at <http://people.tamu.edu/~kmeier/teep/>

LATINO STUDENT IMPROVEMENTS ON THE TAAS EXAM

Minority student pass rates in Texas on the TAAS exam consistently have lagged behind those for Anglo students. Recent trends in Latino test scores, however, show some slight gains. From 1995 to 1998, the statewide pass rate for Latino students on the TAAS has improved from 46.1% to 61.9%, compared to a rate of change for non-minority students of 74.8% to 87.9%. This narrowing of the gap in Latino/Anglo pass rates, while modest, is notable, but much more progress is needed. One of the major goals of the Texas Educational Excellence Project is identifying those school districts that have made significant strides in improving the performance of Latino students on the TAAS exam. By identifying exemplary districts, we hope to provide the public and policy makers with information that will inform future policy making efforts aimed at improving Latino education in Texas.

The technique of analysis used by the Texas Educational Excellence Project is that of multiple regression. This analytical tool makes it possible to develop generalizations about the overall performance of Texas school districts in educating Latino students, while also providing information that can be used to make comparisons across individual school districts. Our model is based on what is generally known as an education “production function” where student performance (defined as Latino pass rates on the TAAS) is a function of inputs into the educational process, such as operating expenditures, student-teacher ratios, and various educational policies. Estimation of this production function results in predictions about how well districts are expected to do, given the level of inputs available to them. Based on the results of the production function model, we compare how well districts *actually* perform to how well the statistical model *predicts* they should perform based on their inputs. The difference, if any, between the actual results and the predictions indicates how well districts are doing in educating Latino students.

The Texas school districts included in the study are those with at least 1000 students, which have no more than 90 percent Anglo students and at least 10 percent Latino students. In other words, we focus on multiethnic districts. This restriction results in a total number of 303. Most of the data used in the analysis comes from the Texas Educational Agency and the rest from the U. S. Bureau of the Census, School District Data File.

As noted above, the statewide results showed a slight narrowing of the gap between Latino and Anglo students on TAAS pass rates. For our multiethnic districts, the 1995 gap was 47.6 percent Latino vs. 71.3 percent Anglo while by 1998 the gap was 69.2 percent Latino vs. 86.6 percent Anglo. In three years, the Latino-Anglo gap narrowed from 24.7 points to 17.4 points, a considerable reduction.

Dependent Variable: Student Performance

Several states use annual standardized tests to assess achievement at the basic skills level, and, often, require a certain level of proficiency on the test as a graduation requirement. While basic skills are not the only educational focus of public schools, they are a crucial element and offer one measure of performance. The state of Texas requires students in certain grades to take

standardized TAAS tests every year. The percentage of Latino students in each district who pass these tests is the dependent variable in our analysis. We do not claim that results on TAAS exams account for all of the overall learning experience of Latino students. Student performance is a multi-dimensional concept that can be measured in variety of different ways. However, pass rates on TAAS exams **do** measure whether students are picking up basic academic skills from grade to grade. Our dependent variable, therefore, focuses primarily on how well districts perform in teaching Latino students basic skills, and should not be construed as an overall measure of Latino student learning.

Independent Variables

We establish an education production function by including a variety of factors known to influence educational performance. These variables are culled from the education literature and are frequently used in education production functions. Our variables can be divided into two sets of independent variables. The first set of variables includes resource input and educational policy variables. The second set of variables includes measures that control for differences in environmental characteristics across school districts.

Resource and Policy Variables

1. Expenditures. The question of what relationship exists between expenditures and educational outcomes is one of the most contested questions in all of educational policy. Hanushek (1986; 1989; 1996) contends that there is no consistent relationship between money and student outcomes. Although this finding has been challenged by others (Hedges and Greenwald 1996), it remains the conventional wisdom. In recent longitudinal studies, however, Murray (1995), Evans, Murray and Schwab (1997), and Murray, Evans and Schwab (1995) found that districts that increased expenditures had improved performance afterward. Bohte (1999) found that expenditures in Texas were correlated with higher test scores even when controlling for the previous year's test scores. We consider expenditures a critical variable for inclusion in the model.

We use three distinct expenditure variables: per pupil operating expenditures; teacher salaries; and the percentage of district money from state funds. Per pupil operating expenditures are used in preference to total per pupil spending because many Texas districts spend lavishly on non-operating activities. Education is personnel intensive, and most spending pays salaries of teachers and other staff. Higher salaries are perceived in economic theory as a way to attract better qualified persons to a profession (Hanushek and Pace 1995). Finally, state aid can be used to compensate for inequities in local tax bases. Although Texas is not known for redistributive educational policies and has a long history in court on this issue (*San Antonio Independent School District v. Rodriguez*, 1973; *Edgewood Independent School District v. Kirby*, 1987; See also Texas Research League 1986; Accountable Cost Advisory Committee 1986; Weiher 1988), greater funds from state governments can compensate for a meager local tax base. The relationships between these expenditure variables and district Latino pass rates should be positive - i.e., more financial resources should lead to better performance on TAAS exams.

2. Teacher Attributes. Teachers are a crucial force in shaping student performance. The

presence of more experienced teachers should have a positive effect on student performance. In this sense, teacher experience is an important resource variable. Our first variable is a measure of average teacher experience (in years) for each district. To further measure teacher attributes, we also include the percentage of non-certified teachers in each district. Our expectation is that this relationship should be negative.

3. Policy Variables. Education policies are specific policies adopted to influence student performance. Two such policies deal with the student learning environment--class size and gifted classes. Although many studies indicate that only major changes in class size are effective, schools with smaller class sizes should have an advantage at the margins (see Pate-Bain et al. 1992; Nye et al. 1992; Hedges and Greenwald 1996; Hanushek 1996, 54; Bohte 1999). Our first policy variable is the student-teacher ratio in each district. We expect this variable to have a negative relationship to student pass rates. Gifted classes are generally viewed as venues for providing the best education that a school system can offer (See DeHaan 1963). The number of students enrolled in gifted classes varies greatly across school districts in Texas (from zero to more than thirty percent). Greater access to gifted classes should result in better student performance. To summarize, class size should have a negative relationship to exam performance, while the availability of gifted classes should be positively related to exam performance.

Control Variables

School districts, especially in Texas, vary widely in terms of environmental or background characteristics. To ensure that we are comparing apples to apples, controls must be included for various district background characteristics. Using of controls for district background characteristics is also a crucial step that facilitates comparisons of findings across different school districts.

Our first control variable measures district poverty. In the context of educational policy, poverty is a serious constraint on student performance. Poverty not only means students lack access to learning tools in the home (computers, educational toys, etc.) but is also correlated with a less stable and less supportive home environment (e.g., single parent households, high rates of teen pregnancy, and low educational expectations; Necochea and Cune 1996; Fuller et. al. 1996). Our first measure of poverty is the percent of students in each district that qualify for free or reduced-price meals in school lunch programs. As the percentage of students in poverty rises, district pass rates on TAAS exams should decline. Our second poverty measure was the percentage of Hispanic families in the school district with incomes below the poverty level.

The home educational background of Latino students is the third control variable used in the analysis. We use the percentage of Latino adults, age 25 and older with at least a high school education. Generally, minority students who come from districts in which there are large numbers of adult Latinos with strong educational backgrounds tend to perform at higher levels than students who come from districts where there are lesser numbers of educated Latinos (Meier and Stewart 1991). The relationship between percentage of high school educated Latinos and Latino pass rates should be positive.

Our final control variable is student attendance, measured as percentage average daily attendance. Crucial to learning is the idea that students attend class. Our expectation is that the relationship between attendance and student performance should be positive.

Findings

Our production function is based on a pooled-time series analysis of educational inputs and average Latino pass rates using data from the years 1995 through 1998. As any time series tends toward serial correlation, we include a series of dummy variables to control for any serial correlation.

The basic production function is found in Table 1. The results show that most of the variables, with the exception of class size, per pupil instructional funds and teacher experience, are significant predictors of average district Latino pass rates.

Our other variables perform about as expected. Student attendance is strongly related to high performance as are teacher experience, teacher salaries and state aid. Pass rates tend to be depressed in districts with high numbers of uncertified teachers, high district poverty levels, and high percentages of students from low income families. Essentially, these results are very similar to previous research on minority student achievement (see Meier and Stewart, 1991; Polinard, Wrinkle, and Meier, 1995).

Results from this education production function make it possible to identify Texas school districts that excel in teaching basic reading and mathematics skills to Latino students. For example, our model predicts that the Los Fresnos Consolidated School District should have an average Latino student pass rate of 58.8% from 1995 to 1998. The Los Fresnos actual pass rate of 76.9% represents an 17.1% improvement over this standard. The same logic is used in evaluating the entire sample of Texas school districts. The top school district for Latino students in Texas is the South Texas district, with a rating of +18.3%, followed by Los Fresnos with a rating of +17.1% and Pittsburgh with a rating of +15.37%.

The South Texas school district is somewhat unique and may not be comparable to other districts. The South Texas district is a district that overlays several other school districts and operates magnet schools. As a result, its student body is different from that of most other districts. This qualification should not be taken to imply that South Texas is not an exceptional school district. South Texas produces excellent results for both Anglos and Latinos and has done so for an extended period of time.

The top 25 districts for Latino students are shown in table 2. The first column of that table is the numerical score on which the districts are ranked. The second column is the Latino student pass rate for 1998. The fourth column is the average pass rate for Latino students from 1995 to 1998 in the district. For example, Aldine had a 1995-1998 score of 11.28 to rank tenth. The 1998 score for Aldine was 11.49 and the 1995-1998 average Latino student pass rate on the TAAS was 69.15 percent.

Our ranking is based on the average scores for 1995 through 1998. Consequently, it may not recognize districts where dramatic improvements have been made recently. For example, Brazosport improved a great deal between 1995 and 1998. Brazosport also ranks seventh in Table 3, the ranking of the twenty five best school districts for Latinos in 1998. This compares to Brazosport's ranking of thirteenth out of the more than 300 districts examined for the entire four year period.

The Appendix Table 1 is the alphabetical listing of all of the districts in the study. For each district we report these same scores as noted above as well as its rank among the 303 districts in the study.

Given the rate of improvement in Latino TAAS scores over the past few years and the leadership provided by the high performing Latino districts, we expect that, over the course of the next seven years, these multiethnic districts will continue to close the gap between Latino and Anglo student performance in Texas.

Conclusion

TAAS scores for Latino students in Texas continue to lag behind those for Anglo students. Although Latino students have closed this gap somewhat over the past few years, a substantial difference remains. This study identified school districts in Texas who have done a good job of educating Latino students after adjusting for resources, backgrounds and the type of students. The districts that we identify are those that are performing well above expectations. These are the districts that educators should look to for successful programs.

From our discussion, visits and talks with various school district personnel, we continue to believe that there are no miracles in education, for Latino students or any other types of students. Only well designed programs that are consistently applied over long periods of time produce payoffs. If the top 25 districts have anything in common, it is that, hard work over a long period of time.

The Texas Educational Excellence Project

The Texas Educational Excellence Project (TEEP) is a joint program of the political science departments at Texas A&M University and the University of Texas-Pan American. TEEP seeks to apply scholarly research to educational policy issues in order to make recommendations for greater quality and equity in Texas school systems.

References

- Accountable Cost Advisory Committee. 1986. "Accountable Cost Study and Recommendations of the Accountable Cost Advisory Committee to the State Board of Education." Austin, TX: Texas Education Agency.
- Bothe, John, 1999. "Teacher Salaries, Class Size, and Student Performance." College Station, TX: Texas Educational Excellence Project: Report 4 (January).
- Chubb, John and Terry Moe. 1990. *Politics, Markets and America's Schools*. Washington: Brookings.
- DeHaan, Robert F. 1963. *Accelerated Learning Programs*. Washington: Center for Applied Research in Education, Inc.
- Edgewood Independent School District v. Kirby*. Texas SupCt, No. C-8353, (1989).
- Evans, William N., Sheila E. Murray, and Robert M. Schwab. 1997. "Schoolhouses, Courthouses, and Statehouses After *Serrano*." *Journal of Policy Analysis and Management* 16 (Winter), 10-31.
- Fuller, Bruce, Costanza Eggers-Pierola, Susan D. Holloway, Xiaoyam Liang and Marylee F. Rambaud. 1996. "Rich Culture, Poor Markets: Why do Latino Parents Forego Preschooling?" *Teachers College Record* 97 (Spring):400-418.
- Hanushek, Eric A. and Richard R. Pace. 1995. "Who Chooses to Teach (and Why)?" *Economics of Education Review* 14 (June):107-117.
- Hanushek, Eric A. 1986. "The Economics of Schooling: Production and Efficiency in Public Schools." *Journal of Economic Literature* 24 (September):1141-1177.
- Hanushek, Eric A. 1996. "School Resources and Student Performance." In *Does Money Matter? The Effect of School Resources on Student Achievement and Adult Success*, ed. Gary Burtless. Washington: Brookings.
- Hanushek, Eric A. 1989. "Expenditures, Efficiency, and Equity in Education: The Federal Government's Role." *American Economic Review* 79 (May):46-51.
- Hedges, Larry V. and Rob Greenwald. 1996. "Have Times Changed? The Relation between School Resources and Student Performance." In *Does Money Matter? The Effect of School Resources on Student Achievement and Adult Success*, ed. Gary Burtless. Washington: Brookings.
- Lasswell, Harold. 1936. *Politics: Who Gets What, When, How?* New York: McGraw Hill.

- Lipsky, Michael. 1980. *Street Level Bureaucracy*. New York: Russell Sage Foundation.
- Long, Norton. 1952. "Bureaucracy and Constitutionalism." *American Political Science Review* 46 (September), 808-818.
- Meier, Kenneth J. and Joseph Stewart, Jr. 1991. *The Politics of Hispanic Education*. Albany: SUNY Press.
- Murray, Sheila E. 1995. "Two Essays on the Distribution of Education Resources and Outcomes." PhD. diss. Department of Economics, University of Maryland.
- Murray, Sheila E., William N. Evans and Robert M. Schwab. 1995. "Money Matters After All: Evidence From Panel Data on the Effects of School Resources." University of Kentucky and University of Maryland working paper: The Martin School.
- Necochea, Juan and Zullmara Cune. 1996. "A Case Study of Within District School Funding Inequities." *Equity & Excellence in Education* 29 (September): 69-77.
- Nye, Barbara A., Jayne Boyd-Zacharias, B. Dewayne Fulton, and Mark P. Wallenhorst. 1992. "Smaller Classes Really are Better." *American School Board Journal* 179 (May): 31-33.
- Pate-Bain, Helen, C.M. Achilles, Jayne Boyd-Zacharias, and Bernard McKenna. 1992. "Class Size Does Make a Difference." *Phi Delta Kappan* 74 (November): 253-56.
- Polinard, J. L., Robert D. Wrinkle and Kenneth J. Meier. 1995. "The Influence of Educational and Political Resources on Minority Students' Success," *Journal of Negro Education* 64: 463-474.
- San Antonio Independent School District v. Rodriguez*. 411 U.S. 1 (1973).
- Smith, Kevin B. and Kenneth J. Meier. 1995. *The Case Against School Choice*. Armonk, NY: M.E. Sharpe.
- Texas Research League. 1986. "Bench Marks for 1986-87 School District Budgets in Texas." Austin, TX: Texas Research League.
- Weiher, Gregory R. 1988. "Why Redistribution Doesn't Work: State Educational Reform Policy and Governmental Decentralization in Texas." *American Politics Quarterly* 16 (April): 193-210.

TABLE 1: LATINO EDUCATIONAL PRODUCTION FUNCTION

<u>Variable</u>	<u>Coefficient</u>	<u>Standard Error</u>
Low Income	-.0632	.0173
Gifted	.2576	.0659
Attendance	3.1286	.2883
Teacher Salary K	.7522	.1684
Class size	-.1128	.2332
Teacher Certification	-.1823	.0735
Teacher Experience	.0159	.1728
State Aid	.0364	.0126
High School Education	.1009	.0304
%Poverty Background	-.0890	.0256
Per Pupil Instructional	.0010	.0010

R2 (adj)= .62

F= 149.04

significance of F < .000

Table 2. 25 Best Districts for Latino Students

<u>Rank</u>	<u>Name</u>	<u>Score</u>	<u>98 Score</u>	<u>Average</u>
1	South Texas	18.30	11.59	88.38
2	Los Fresnos Con	17.09	18.95	76.93
3	Pittsburgh	15.37	15.24	68.35
4	White Settlement	14.87	9.68	74.78
5	Anahuac	14.18	15.28	70.35
6	Mount Vernon	14.06	9.02	75.03
7	San Benito Cons	13.36	16.76	67.38
8	Ferris	13.33	10.80	70.45
9	Mission Cons	13.01	9.82	72.70
10	Aldine	11.28	11.49	69.15
11	Del Valle	11.17	17.44	60.95
12	Texas City	11.16	6.19	69.60
13	Brazosport	10.95	14.02	75.30
14	Alvarado	10.63	11.57	64.93
15	Columbia-Brazoria	9.39	6.87	70.43
16	Pecos-Barstow-T	9.22	8.68	62.92
17	Tuloso-Midway	9.15	10.86	65.38
18	Ysleta	9.06	10.98	66.43
19	Hidalgo	9.01	8.39	62.70
20	Childress	8.97	1.00	66.05
21	Tatum	8.90	-0.06	69.90
22	Pearland	8.85	9.27	74.30
23	Jim Hogg County	8.84	8.88	68.10
24	Edna	8.67	10.54	67.80
25	Mexia	8.66	0.67	65.10

Table 3. 25 Best Districts for Latinos 1998

<u>Rank</u>	<u>Name</u>	<u>98 Score</u>
1	Los Fresnos Cons	18.95
2	McGregor	17.51
3	Del Valle	17.44
4	San Benito Cons	16.76
5	Anahuac	15.28
6	Pittsburgh	15.24
7	Brazosport	14.02
8	Point Isabel	11.64
9	South Texas	11.59
10	Alvarado	11.57
11	Lytle	11.55
12	Aldine	11.49
13	Ysleta	10.98
14	Tuloso-Midway	10.86
15	Burnet Cons	10.85
16	Ferris	10.80
17	El Campo	10.66
18	Coleman	10.61
19	Edna	10.54
20	Terrell	10.43
21	West Oso	10.32
22	Frenship	9.90
23	Mission Cons	9.82
24	White Settlement	9.68
25	Monahans-Wicket	9.46

Appendix Table 1. Scores for All Districts

Rank	Name	Score	98 Score	Average
161	Abilene	-0.59	0.33	58.80
289	Alamo Heights	-9.28	-12.91	61.85
10	Aldine	11.28	11.49	69.15
112	Alice	2.47	5.40	56.72
250	Alief	-5.99	-5.25	57.08
131	Alpine	0.98	-0.82	62.22
14	Alvarado	10.63	11.57	64.93
77	Alvin	4.10	5.89	62.15
95	Amarillo	3.16	1.20	59.90
5	Anahuac	14.18	15.28	70.35
38	Andrews	7.23	5.39	66.60
46	Angleton	6.48	9.33	71.18
88	Aransas County	3.45	8.04	59.67
260	Aransas Pass	-6.66	-5.47	48.97
286	Arlington	-9.16	-10.10	55.95
259	Athens	-6.52	-6.66	47.83
273	Austin	-7.53	-8.50	47.22
122	Ballinger	1.53	-2.60	61.50
202	Bandera	-2.55	4.24	56.05
192	Bastrop	-1.95	0.55	53.10
61	Bay City	4.81	8.50	58.95
89	Beeville	3.35	4.65	58.38
160	Belton	-0.49	2.95	59.35
80	Big Spring	3.92	2.79	59.40
97	Bishop Consolidated	3.10	6.85	62.28
172	Boerne	-0.84	0.45	60.88
75	Borger	4.12	1.18	63.55
68	Brady	4.46	7.18	62.92
13	Brazosport	10.95	14.02	75.30
27	Breckenridge	8.37	8.16	65.47
118	Bridgeport	2.13	0.36	60.80
213	Brooks	-3.65	-2.94	48.38
255	Brownfield	-6.35	-6.16	50.67
180	Brownsville	-1.21	2.57	54.92
78	Brownwood	4.08	4.64	59.58
278	Bryan	-7.86	-3.51	51.72
150	Burnet Consolidated	-0.08	10.85	57.55
29	Calallen	8.31	6.03	71.60
50	Caldwell	5.84	4.42	65.10
156	Calhoun County	-0.25	-0.12	55.13
135	Cameron	0.92	5.11	57.65
252	Canutillo	-6.02	-5.57	49.75
178	Carrizo Springs Cons	-1.11	-4.50	53.40
190	CarrolltonFarmers Br	-1.94	-5.06	63.67

136	Castleberry	0.91	-8.74	57.92
102	Cedar Hill	2.88	-6.94	68.47
108	Channelview	2.75	-1.88	63.95
20	Childress	8.97	1.00	66.05
93	Clear Creek	3.18	0.56	70.55
219	Cleburne	-3.96	-8.97	55.50
301	Cleveland	-13.49	-15.30	37.90
65	Clint	4.60	5.13	58.65
33	Coleman	7.87	10.61	67.05
214	Colorado	-3.68	-1.21	55.10
15	Columbia-Brazoria	9.39	6.87	70.43
218	Columbus	-3.95	-3.18	55.58
199	Comal	-2.43	0.74	58.00
227	Comanche	-4.30	-3.73	58.25
47	Connally	6.40	5.09	66.38
265	Conroe	-6.81	-6.72	55.00
55	Copperas Cove	5.45	7.70	68.05
144	Corpus Christi	0.30	3.31	60.75
110	Corrigan-Camden	2.62	0.44	60.00
183	Corsicana	-1.37	-2.24	54.40
298	Cotulla	-12.59	-14.74	41.92
81	Crane	3.82	4.28	65.53
258	Cureo	-6.46	-4.25	51.40
139	Cypress-Fairbanks	0.74	-2.48	66.72
36	Dalhart	7.66	8.53	64.68
222	Dallas	-4.06	-7.90	52.40
184	Decatur	-1.54	-6.78	56.65
235	Deer Park	-4.84	-4.61	59.75
11	Del Valle	11.17	17.44	60.95
275	Denton	-7.59	-7.91	52.63
64	Denver City	4.61	2.96	68.38
224	Devine	-4.11	-6.35	56.42
239	Diboll	-5.13	-11.11	51.88
282	Dickinson	-8.47	-8.39	43.95
79	Dilley	4.07	0.69	58.90
203	Dimmitt	-2.77	-0.71	54.05
147	Donna	-0.05	-1.63	51.15
300	Dublin	-12.80	-10.15	41.15
82	Dumas	3.80	6.82	58.38
154	Duncanville	-0.23	1.89	64.50
90	Eagle Mt-Saginaw	3.30	4.61	66.63
71	Eagle Pass	4.31	7.43	59.22
242	East Central	-5.29	-3.51	58.70
30	Eastland	8.31	8.71	66.97
59	Ector County	4.96	5.04	57.53
60	Edcouch-Elsa	4.96	4.17	64.85
158	Edgewood	-0.44	-0.19	49.92

58	Edinburg	5.10	5.86	61.83
24	Edna	8.67	10.54	67.80
176	El Paso	-1.02	-1.50	56.38
85	El Campo	3.69	10.66	62.67
238	Elgin	-5.13	-3.12	52.67
148	Ennis	-0.05	-4.39	58.80
51	Everman	5.84	8.84	67.63
269	Fabens	-6.99	-7.97	49.08
8	Ferris	13.33	10.80	70.45
155	Floresville	-0.24	0.78	55.35
100	Flower Bluff	3.00	6.77	65.38
293	Floydada	-11.44	-17.04	43.08
280	Fort Bend	-8.10	-7.36	57.80
279	Fort Worth	-7.92	-8.18	46.58
253	Fredericksburg	-6.21	-6.66	51.17
49	Freer	6.31	7.37	64.18
34	Frenship	7.72	9.90	67.40
191	Friona	-1.94	2.42	57.45
86	Frisco	3.61	0.70	62.92
231	Ft Sam Houston	-4.50	-2.98	71.25
96	Ft. Stockton	3.14	6.14	57.85
73	Gainesville	4.23	-4.89	62.30
182	Galena Park	-1.37	2.89	56.25
91	Galveston	3.27	9.12	54.78
104	Garland	2.86	-0.72	65.60
247	George West	-5.87	-7.28	54.78
233	Georgetown	-4.63	-7.96	61.22
167	Giddings	-0.72	-1.77	59.80
171	Glen Rose	-0.83	2.72	61.90
42	Goliad	6.72	4.43	67.02
240	Gonzales	-5.15	-6.27	50.42
57	Goose Creek	5.11	4.41	61.50
221	Graham	-4.05	-0.90	57.25
141	Grand Prairie	0.57	-2.05	62.53
209	Greenville	-3.41	-6.11	53.15
267	Greenwood	-6.84	-7.98	56.80
107	Gregory-Portland	2.81	2.36	68.13
56	Groesbeck	5.45	-1.47	64.50
268	Harlandale	-6.99	-2.81	50.70
69	Harlingen	4.34	6.55	65.93
262	Hayes Consolidated	-6.69	-3.38	54.63
169	Hearne	-0.77	-2.61	56.10
296	Hempstead	-12.38	-10.86	41.70
127	Hereford	1.19	2.17	57.00
19	Hidalgo	9.01	8.39	62.70
117	Hillsboro	2.19	3.24	54.38
284	Hitchcock	-8.79	-8.34	48.33

223 Hondo	-4.09	-3.45	51.58
195 Houston	-2.14	-0.83	52.97
115 Hudson	2.25	0.12	62.97
244 Huntsville	-5.45	-6.04	54.53
228 Ingleside	-4.34	-6.74	55.20
264 Ingram	-6.78	-2.97	53.92
123 Irving	1.43	-0.01	63.03
294 Jacksonville	-11.47	-11.80	41.65
23 Jim Hogg County	8.84	8.88	68.10
153 Jourdanton	-0.23	-3.74	59.33
193 Judson	-1.98	-2.55	64.63
114 Katy	2.28	0.76	71.63
32 Kaufman	7.87	6.54	62.83
271 Kenedy	-7.34	-11.28	47.05
274 Kermit	-7.56	-9.31	48.38
120 Kerrville	1.75	2.04	62.03
194 Killeen	-2.04	0.36	62.97
173 Kingsville	-0.87	1.66	57.92
186 Klein	-1.56	-6.39	67.53
134 La Porte	0.93	-1.32	65.22
35 La Feria	7.69	8.79	67.80
200 La Vega	-2.45	4.02	52.55
113 La Joya	2.36	0.61	52.55
145 La Grange	0.19	-2.36	57.60
288 La Vernia	-9.26	5.92	56.30
159 Lake Worth	-0.48	3.23	49.83
162 Lamar Consolidated	-0.60	1.38	58.65
217 Lamesa	-3.89	-7.87	50.72
109 Lampasas	2.73	6.80	60.92
216 Lancaster	-3.88	-8.29	56.85
230 Laredo	-4.46	-9.89	55.70
211 Leander	-3.48	0.09	59.88
188 Levelland	-1.65	-1.75	56.88
220 Liberty	-4.01	-1.47	53.80
101 Littlefield	2.94	1.28	59.60
111 Lockhart	2.50	0.70	58.78
2 Los Fresnos Consolid	17.09	18.95	76.93
197 Lubbock	-2.17	-1.70	57.35
84 Lubbock-Cooper	3.73	2.56	63.95
257 Lufkin	-6.40	-4.78	50.58
196 Luling	-2.15	-12.10	53.45
187 Lyford	-1.61	-0.99	53.80
146 Lytle	0.17	11.55	55.90
137 Madisonville	0.88	-3.55	58.15
152 Manor	-0.22	-4.74	54.70
99 Mansfield	3.02	6.64	66.45
241 Marble Falls	-5.24	-8.05	50.97

164	Marlin	-0.62	3.77	53.40
281	Mathis	-8.19	-7.21	43.55
37	McAllen	7.31	6.41	66.30
31	McGregor	7.88	17.51	71.45
283	McKinney	-8.73	-11.62	48.60
149	Medina Valley	-0.07	-1.24	58.58
168	Mercedes	-0.76	-2.20	59.00
54	Merkel	5.67	-2.05	65.50
132	Mesquite	0.98	-0.79	63.55
25	Mexia	8.66	0.67	65.10
261	Midland	-6.68	-6.70	49.10
166	Mineral Wells	-0.72	-4.67	53.92
9	Mission Consolidated	13.01	9.82	72.70
28	Monahans-Wickett-Pyo	8.35	9.46	67.72
70	Mount Pleasant	4.32	-6.74	59.70
6	Mount Vernon	14.06	9.02	75.03
201	Muleshoe	-2.53	-0.36	54.85
290	Nacogoches	-9.35	-10.45	47.72
248	Navasota	-5.91	-6.61	49.50
165	Needville	-0.71	-1.81	63.65
179	New Braunfels	-1.12	0.79	59.55
62	Newton	4.75	2.53	61.88
44	North Forest	6.63	8.28	61.40
163	North East	-0.61	-2.52	65.78
198	Northside	-2.34	-2.33	61.67
126	Odem-Edroy	1.34	2.98	62.25
206	Orange Grove	-3.27	-4.18	56.75
189	Palacios	-1.73	-1.25	63.63
254	Palestine	-6.21	-2.40	50.17
52	Pampa	5.79	3.45	67.00
185	Pasadena	-1.54	1.74	56.55
22	Pearland	8.85	9.27	74.30
16	Pecos-Barstow-Toyah	9.22	8.68	62.92
129	Perryton	1.07	2.78	61.60
138	Pflugerville	0.85	-3.15	69.15
92	Pharr-San Juan-Alamo	3.21	4.85	60.97
3	Pittsburgh	15.37	15.24	68.35
40	Plainview	7.02	5.08	63.75
174	Pleasanton	-0.88	2.47	54.30
26	Point Isabel	8.55	11.64	65.20
130	Port Arthur	1.04	-0.68	51.10
105	Post	2.85	-1.45	62.38
291	Poteet	-9.38	-4.55	46.28
125	Presidio	1.36	6.30	51.17
63	Randolph Field	4.74	1.86	79.23
181	Raymondville	-1.36	-2.17	54.15
175	Reagan County	-0.97	-4.09	63.22

236 Red Oak	-4.97	-5.29	60.03
124 Rice Consolidated	1.37	8.75	55.42
256 Richardson	-6.36	-7.10	58.33
140 Rio Hondo	0.62	3.05	59.17
39 Robinson	7.06	5.01	71.90
103 Robstown	2.88	6.93	55.92
263 Rockdale	-6.74	-4.25	53.08
170 Roosevelt	-0.81	-1.38	59.15
177 Round Rock	-1.02	-3.22	65.88
151 Royal	-0.22	-2.42	48.13
43 Royse City	6.67	7.26	67.35
133 San Marcos	0.98	3.35	56.80
67 San Felipe-Del Rio C	4.54	1.53	59.20
297 San Antonio	-12.40	-10.85	44.85
7 San Benito Consolida	13.36	16.76	67.38
302 San Elizario	-14.41	-19.14	38.47
205 San Angelo	-3.08	-1.12	56.35
266 San Diego	-6.84	-5.56	44.22
287 Santa Rosa	-9.20	-6.31	48.47
276 Schertz-Cibolo-U. Ci	-7.81	-7.38	54.08
212 Sealy	-3.60	0.22	57.70
229 Seguin	-4.35	-5.21	52.85
204 Seminole	-2.88	-1.31	58.10
225 Shallowater	-4.19	-4.84	55.50
106 Sharyland	2.84	6.09	65.13
208 Sheldon	-3.36	-6.83	58.30
157 Sinton	-0.40	0.86	56.80
249 Slaton	-5.93	-5.53	51.50
299 Smithville	-12.61	-5.25	45.40
87 Snyder	3.46	4.43	62.03
94 Socorro	3.18	4.25	62.03
285 Somerset	-8.99	-9.31	46.97
272 Sonora	-7.46	-4.06	54.25
1 South Texas	18.30	11.59	88.38
234 South San Antonio	-4.79	-3.92	55.42
295 Southside	-12.20	-10.98	39.40
251 Southwest	-6.02	0.56	48.95
245 Spring	-5.54	-3.06	63.20
215 Spring Branch	-3.74	-3.59	55.83
232 Stafford MSD	-4.62	-6.51	59.00
83 Stephenville	3.76	5.22	65.05
53 Sweeny	5.67	7.27	68.55
226 Taft	-4.21	2.05	49.13
21 Tatum	8.90	-0.06	69.90
210 Taylor	-3.43	-0.58	54.50
303 Teague	-21.63	-22.25	39.15
277 Temple	-7.82	-8.08	53.30

45 Terrell	6.57	10.43	66.05
12 Texas City	11.16	6.19	69.60
66 Troy	4.55	-3.16	68.20
41 Tulia	6.74	4.39	64.15
17 Tuloso-Midway	9.15	10.86	65.38
243 Tyler	-5.31	-6.01	52.42
76 United	4.11	3.57	59.20
246 Uvalde Consolidated	-5.72	-4.13	48.40
142 Van Vleck	0.56	-5.10	64.45
72 Vernon	4.30	0.48	62.20
98 Victoria	3.07	3.08	57.75
207 Waco	-3.34	2.42	47.50
292 Waller	-10.81	-9.04	44.30
143 Waxahachie	0.37	-2.39	61.45
48 Weslaco	6.38	9.04	65.57
128 West Oso	1.08	10.32	54.25
4 White Settlement	14.87	9.68	74.78
121 Wharton	1.60	4.34	57.90
74 Wichita Falls	4.17	5.09	63.65
237 Willis	-4.99	0.88	51.80
119 Wilmer-Hutchins	2.12	7.83	54.05
270 Yoakum	-7.02	-3.38	53.22
18 Ysleta	9.06	10.98	66.43
116 Zapata	2.23	1.94	55.85