

Texas Public Transit and You

Grade Level: 5-8

Objective: The students will discover statistics about public transit and discuss reasons behind those statistics.

TEKS:

Math: 5.3(A,C), 5.14(A,B,D), 5.16(A,B), 6.2(C,D), 6.11(A,B,D), 7.1(B), 7.2(A,B), 7.13(A,B,D), 8.14(A,B,D)

Science: 5.2(A,B,C,D), 5.3(A,B,C), 6.2(A,B,C,D), 6.3(A,B,C), 7.2(A,B,C,D), 7.3(A,B,C), 8.2(A,B,C,D), 8.3(A,B,C)

Social Studies: 5.8(D), 5.14(E), 5.25(A,B,C,D,F), 5.26(A,C,D), 6.5(A), 6.21(A,B,C,D,F), 6.22(A,C,D), 7.21(A,B,C,D,H), 7.22(A,B,D), 8.30(A,B,C,D,H), 8.31(A,B,D)

ELA: 5.1(A,B,C), 5.4(A), 5.5(B,F), 5.13(A,B,C,D,E,G,H), 6.1(A,B,C), 6.4(A), 6.5(B,F), 6.13(A,B,C,D,E,G,H), 7.1(A,B,C), 7.4(A), 7.5(B,F), 7.13(A,B,C,D,E,G,H), 8.1(A,B,C), 8.4(A), 8.5(B,F), 8.13(A,B,C,D,E,G,H)

Time: one class period

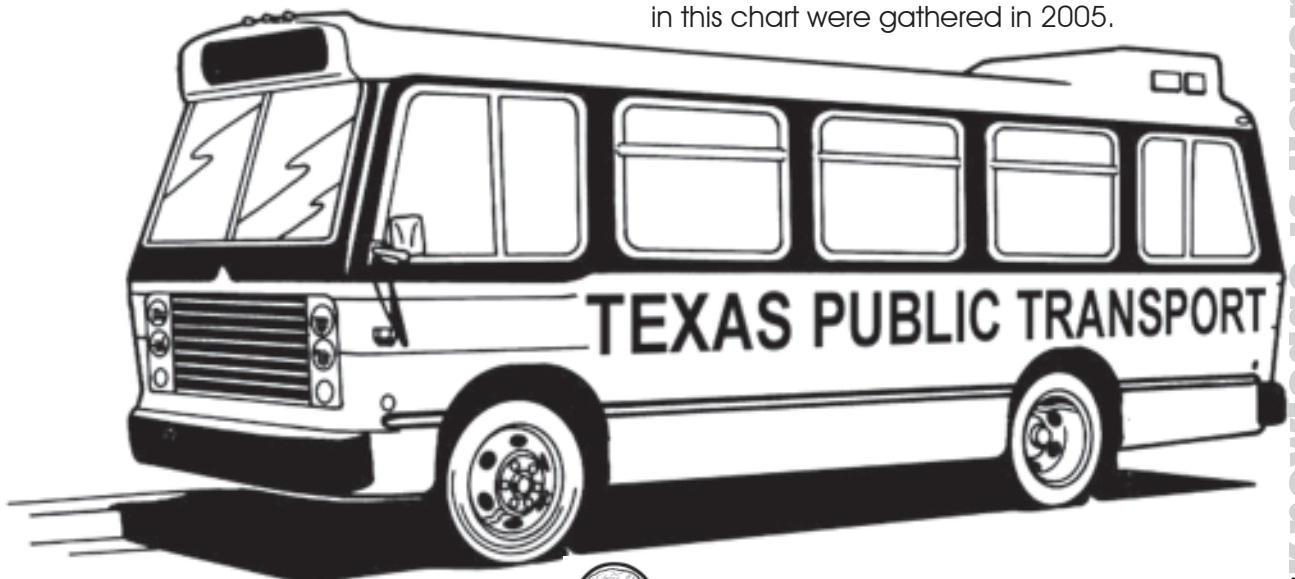
Materials: one worksheet per student, one Texas map per group, and literature about each town

Vocabulary: ridership, public transit, rank

Background Information:

Ridership is defined as the number of people that ride public transit in a day. Large cities spend lots of dollars and hours to determine ways to increase ridership. Houston and Dallas have put in mass transit trains to better serve their populations. Corpus Christi has increased the areas and neighborhoods the bus goes to and streamlined the use of special service busses. These services are very important to the populations that currently use public transit and will be useful to more residents as the cities grow and traffic becomes heavier.

The following information was put together by visiting the websites of each city's public transit system and/or from speaking to the transportation director in some of the smaller towns. If your area has a public transit system, call the transportation director of your city and add the information to the chart. The numbers in this chart were gathered in 2005.



Setting the Stage:

Ask the students how many have ridden on public transportation (not a school bus). Have them describe where, why and how they felt.

Activity 1: Who rides most?

Make a photocopy of the chart worksheet for each student. Have them fill in the percent column by dividing the total population into the number of riders each day. Have them rank the cities based on their ridership numbers. Which ones have the most riders, which has the least, which ones have the largest percentage of their population using public transit, etc.

Activity 2: Why this town?

Make a graphic organizer with three columns. In the first column have the students list things they know about each city. Have them work in groups to fill in this column. It can be a bulleted list or a train-of-thought random listing. The next column is things the students want to know about the cities. This would be a good time to have the students share some of the categories of information they have come up with (Austin has several colleges, or Austin is the home of The University of Texas). You could also give examples such as, size, layout, colleges, type of jobs there, activities in that town, etc. Then give each group a Texas map and

City Name	Rank in size Nationally	Population of City	Number of Riders Each Day	% of the population riding public transit
Houston	4	2,009,834	323,287	16.1%
Dallas	8	1,211,467	258,630	21.35%
San Antonio	9	1,194,222	131,914	11.05%
Austin	16	671,873	130,000	19.35%
El Paso	22	577,415	35,616	6.2%
Corpus Christi	59	278,520	18,331	6.6%
Galveston	504	56,709	3,141	5.5%



some literature about the cities that they can draw more information from. Place this information in the third column, things they learned about the cities. This is a modified KWL approach. A sample KWL chart is included for you.

Switch groups and have each child share with the new group. Armed with data and facts about each city, have the students discuss why some cities have better ridership than others and how to increase the ridership in a city. Complete the worksheet.

What I Know Map (or KWL)		
Topic		
What I Know...	What I want to know	What I learned

Discussion:

Who rides the bus? What factors make it easier for people to ride public transit in some cities? How can a city increase ridership?

Extensions:

Write a plan for starting (or increasing) ridership in your town. List major pickup and drop-off locations and reasons why your town should have public transit. Write a letter to your mayor explaining the project and include a copy of your proposed ridership plan.

Resources:

- http://www.apta.com/links/state_local/tx.cfm
- Texas transit links to all cities <http://www.demographia.com/db-city2002.htm> data on city size
- www.capmetro.org Austin
- www.DART.org Dallas
- www.elpasotexas.gov/sunmetro/sunasm.asp El Paso
- www.ridemetro.org Houston
- www.viainfo.net San Antonio
- www.islandtransit.net Galveston
- www.ccrta.org Corpus Christi
- www.gobrt.org bus rapid transit



Busses, Population, and You

Name: _____ Date: _____

Fill in the missing squares by dividing the number of riders each day by the population of that city.

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Answer the following questions using the chart above.

Which city has the most riders? _____

Which city has the least riders? _____

Which city has the largest percentage of the population riding public transit?

Which city has the least percentage? _____

Which city is closest to you? _____



What do you know about these cities? List all the things you know about each city after its name.

Austin: _____

Corpus Christi: _____

Dallas: _____

El Paso: _____

Galveston: _____

Houston: _____

San Antonio: _____

Who rides public transit? _____

What factors make it easier for someone to ride public transit? _____

Which city has best ridership and why? _____

What about that city is different than the others? _____

How could you increase the ridership in the city with the lowest percentage? _____

