

SunLine Transit Travels in the Right Direction!

Making Connections

There is an amazing lizard in California called the fringe toed lizard that actually swims under the sand! Its fringed toes help it to move under the sand dunes it calls home. The fringe toed lizard controls the insects in an area by having them for dinner. These reptiles even have something in common with our atmosphere. The connection between this “sand swimming” lizard and the air is a bus company!

Yes, SunLine Transit, a public bus system in the Palm Springs, California area is helping both the atmosphere and the endangered lizard. SunLine Transit has a strong commitment to helping the environment in many ways. One of the steps they took to help our air was to look at using cleaner fuels in their buses. They are now using compressed natural gas for their buses.

Using natural gas is not a new idea. Legend says that the Chinese used natural gas over 4,000 years ago. They made pipes out of bamboo and piped natural gas from shallow wells. In the 1800's, natural gas was used to light buildings. When electricity came along in the twentieth century, natural gas was not widely used in the United States anymore.



Using An Alternative Fuel

In 1994 SunLine Transit became the first public transit system to change all of its buses so that they ran on compressed natural gas. Compressed natural gas is a **fossil fuel**, but it is safer for our environment than gasoline. It is made up of 95% methane. Natural gas does emit **greenhouse gases** into our air but not as much as regular gasoline. It is a step toward vehicles that produce no pollution at all.

Each SunLine Transit bus carries twelve bottles of compressed natural gas on the roof. This way the gas is out of the way if there is an accident! SunLine Transit also made sure its mechanics were trained to repair natural gas vehicles. They opened twenty-four compressed natural gas fueling stations. These stations provide fuel to SunLine Transit buses and the local postal service that has also changed some of its vehicles to natural gas.



SunLine Transit Helps the Environment in Other Ways

Using natural gas isn't the only way SunLine Transit is helping our atmosphere. To encourage people to use their own cars less, SunLine Transit has a Clean Air Program. They sell bus passes to companies for their employees. The passes cost \$20 for one month. The workers can use these passes to ride the bus at any time during the month. This way, there are fewer cars on the roads in the Palm Springs area. Companies do not have to provide as many parking spaces. People can also bring their bikes on the buses in case they need to ride to a place the bus doesn't serve!

Caring about clean air isn't the only way SunLine Transit helps the environment. They also have seven street sweepers that run on compressed natural gas. These street sweepers clean trash from the streets of the community. They also reduce the amount of tiny particles in the area called PM10. These tiny particles can make **asthma** worse. They can also be harmful to people with other heart and lung diseases.

The street sweepers pick up a lot of sand from the streets. SunLine Transit started a program to return this sand back to the sand dunes in the area. This helps that endangered species, the fringe toed lizard, to survive! Its habitat - the sand dunes - was blowing away. SunLine Transit helps the lizard by returning the sand from the streets to the dunes in a safe way.

Saves Money, Too!

Besides being good for the environment, SunLine Transit has saved local taxpayers \$250,000 a year because of its use of natural gas. This is because natural gas is cheaper to operate than diesel fuel. A school district in Indiana changed its buses to compressed natural gas and saved \$100,000 a year in fuel costs.

Communities in Arizona, Texas, New York, and California are among those developing the use of this cleaner and cheaper fuel. There are approximately 1,900 natural gas transit buses in use in the United States. There are 1,800 orders for more natural gas buses. Until the day that we have vehicles that emit no harmful pollution, these natural gas buses are a good step in the right direction.

You're an Expert!

1. Write a paragraph explaining the difference between regular gas and natural gas. Be sure to use a good topic sentence and concluding sentence.
2. Imagine that you are a commuter who rides a SunLine Transit bus. Think about your reasons for doing this and write a diary entry evaluating your motives for choosing this type of method of getting to work.
3. Imagine that you are a representative of SunLine Transit and you have to testify before Congress about what your company is doing to help the environment. Prepare a short speech and give the speech in front of some classmates. Remember to construct posters that allow "the Congress" to evaluate the success of your company.
4. Form a Board of Directors and decide if you would invest in fuel cell technology or natural gas bus technology. Write the minutes of the meeting.

Taking Action...

Find out if there are any companies in your area that use natural gas. Visit or phone them. Evaluate what you learn and compare it to what you know about SunLine Transit. Construct a poster that uses graphs or webs so that others can assess the information.