

# QUESTION 1

**What words would you use to describe the following pictures?**

# Smog in Tokyo (much of it originating in China)



**Smog is a form of air pollution caused by waste into the atmosphere**



# Government's Environmental Goals

- **Make sure air and water are clean**
- **Preserve trees and open space**



Smog threatens the public's health. Can lead to lung disease, breathing complications



# Why Should We Care?

- The primary reason why governments try to preserve the environment is to protect public health
- Dirty air and water make people sick



# Land Conservation

- Keep land open, and available for the public, and away from private owners and business that will pollute it



# Environmental Goals

- Make sure air and water are clean
  - Dirty air and water not only makes humans sick, but can also kill wildlife populations
- Preserve trees and open space
  - Two large trees can create enough oxygen for a family of four



# Policy #1 - Recycling

- Recycling is good for the environment because it limits the amount of waste that goes into landfills.

# Policy #2 - Tax Credits

- A tax credit is like a tax coupon. If you do something good for the government, you don't have to pay as much tax.
- For example, a government might give tax credits to companies who install solar panels on their buildings.

# Policy #3 - Pollution Limits

- The government creates limits on the amount of pollution a company can create during production.
- If they pollute above this limit, they are fined or can be closed down for repeat offenses.



# Policy #4 - Fuel Standards

- When cars burn gasoline to run their engine, pollution is created.
- The government has set fuel standards so that cars must be able to run a set number of miles per gallon
- If you drive 60 miles per week:
  - 15 mpg means you burn 4 gallons of gas
  - 30 mpg means you burn 2 gallons of gas

# QUESTION

Are there any environmental hazards or threats that are harmful to health in your neighborhood? If so, what are they?

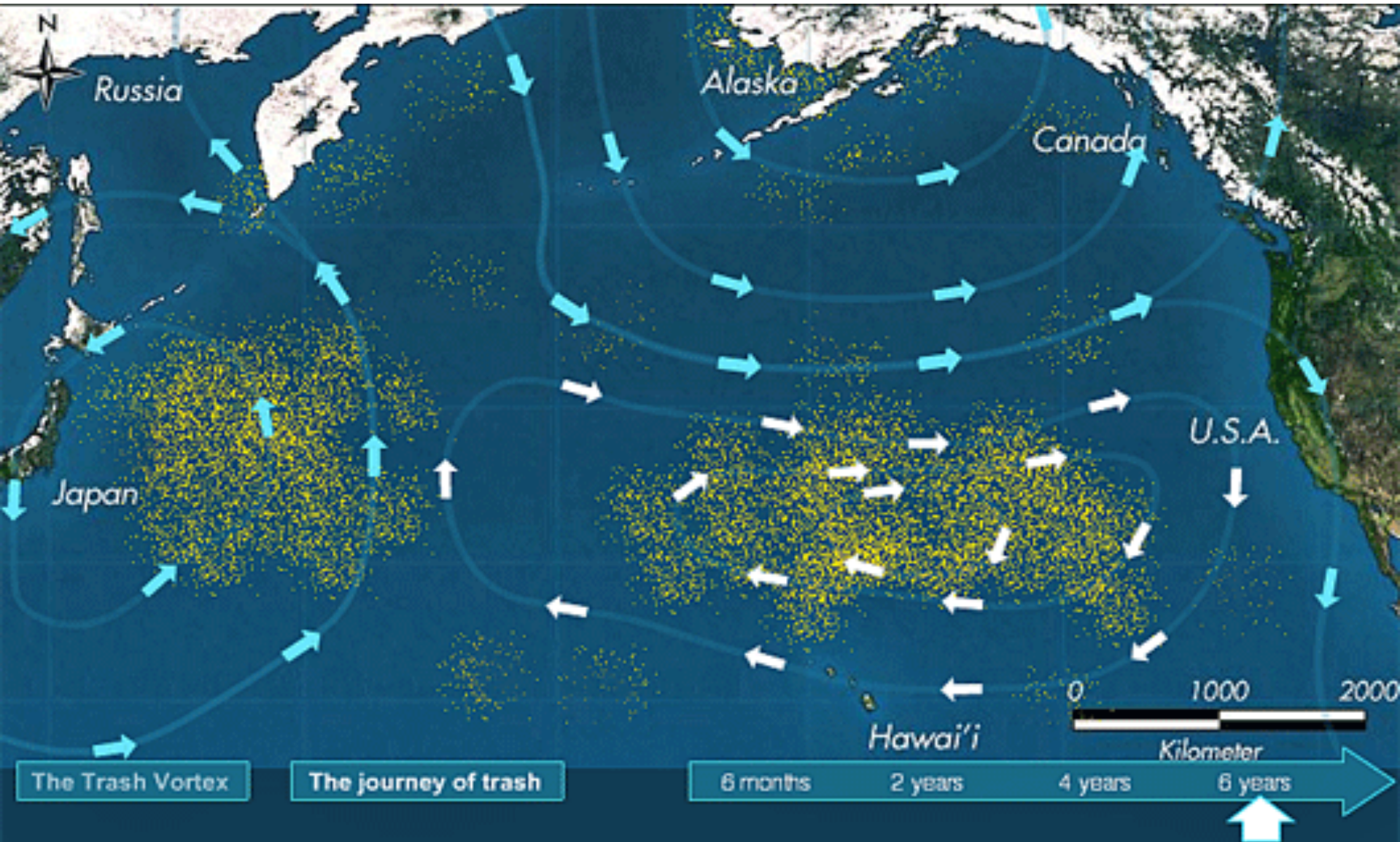
**When water is polluted it becomes a health hazard to both human and animal wildlife.**



**Birds are consuming plastic, rather than fish, from the ocean and dying**



# “The Great Pacific Garbage Dump”



The animation shows how trash (orange dots) entering the sea from land along the Pacific coast is caught by the gyre. On its way the trash is concentrated and eventually ends up in one of the two shown vortices. As a consequence, in these areas, the surface water contains six times more plastic than plankton biomass (dry weight).

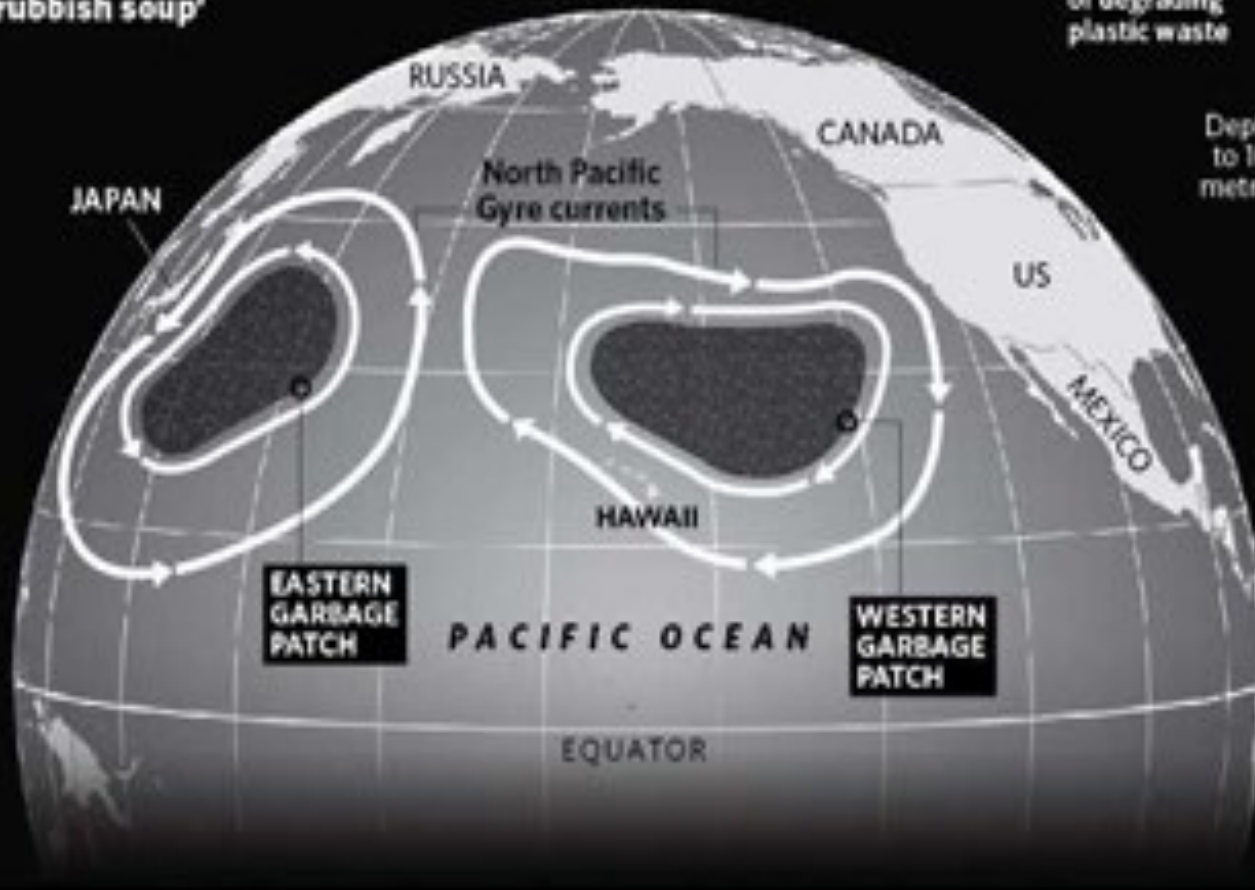


# The garbage patch continues to grow

## Out of sight, out of mind

The continent-sized vortex of plastic waste blighting the Pacific

Approximate areas of 'rubbish soup'



Translucent soup of degrading plastic waste

Depth to 10 metres



SECTION OF GARBAGE PATCH

North Pacific Gyre currents keeps soup in constant movement



# QUESTION

On a scale of 1 to 10, how serious do you consider the trash in the ocean to be?

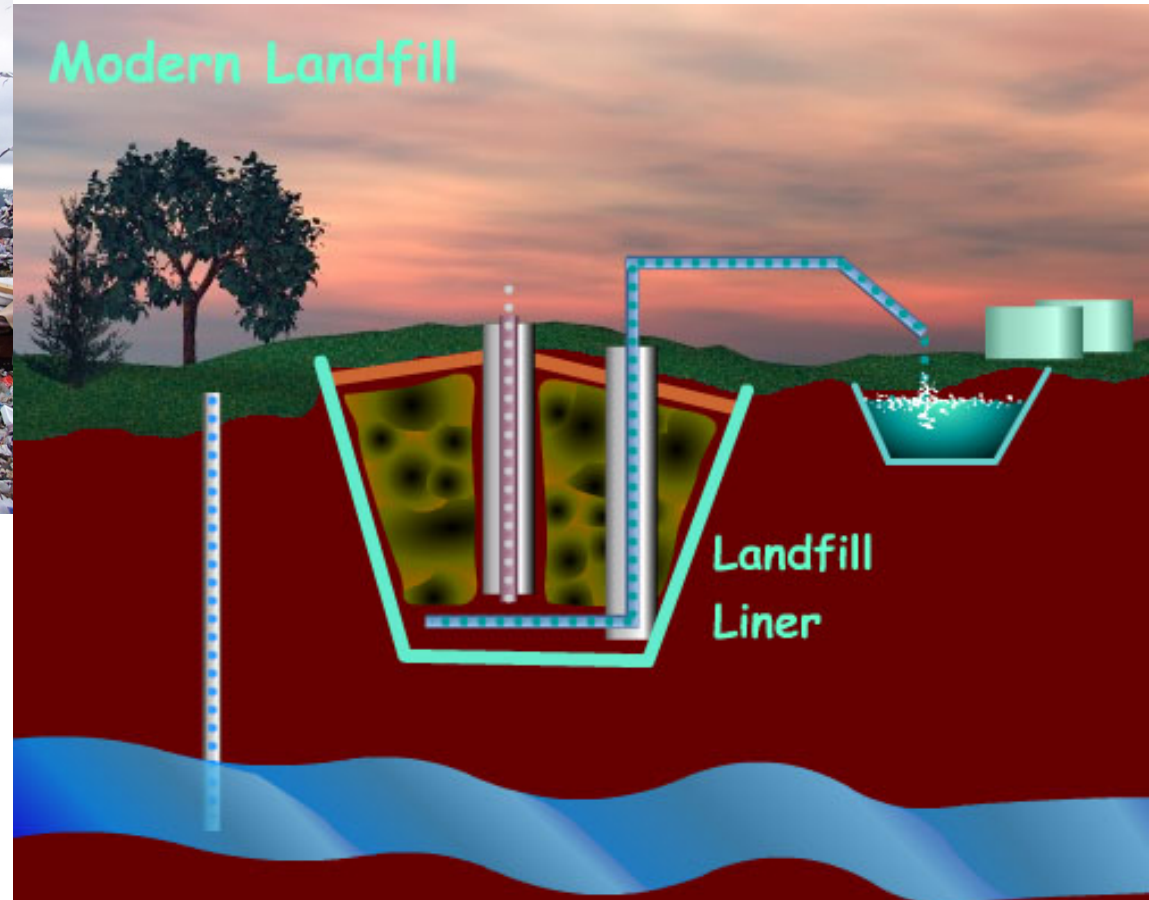
**Due to the large amount of human waste, landfills have been created.**



**Landfill, also known as a dump, is a site for the disposal of waste materials by burial**



# Diagram of a landfill



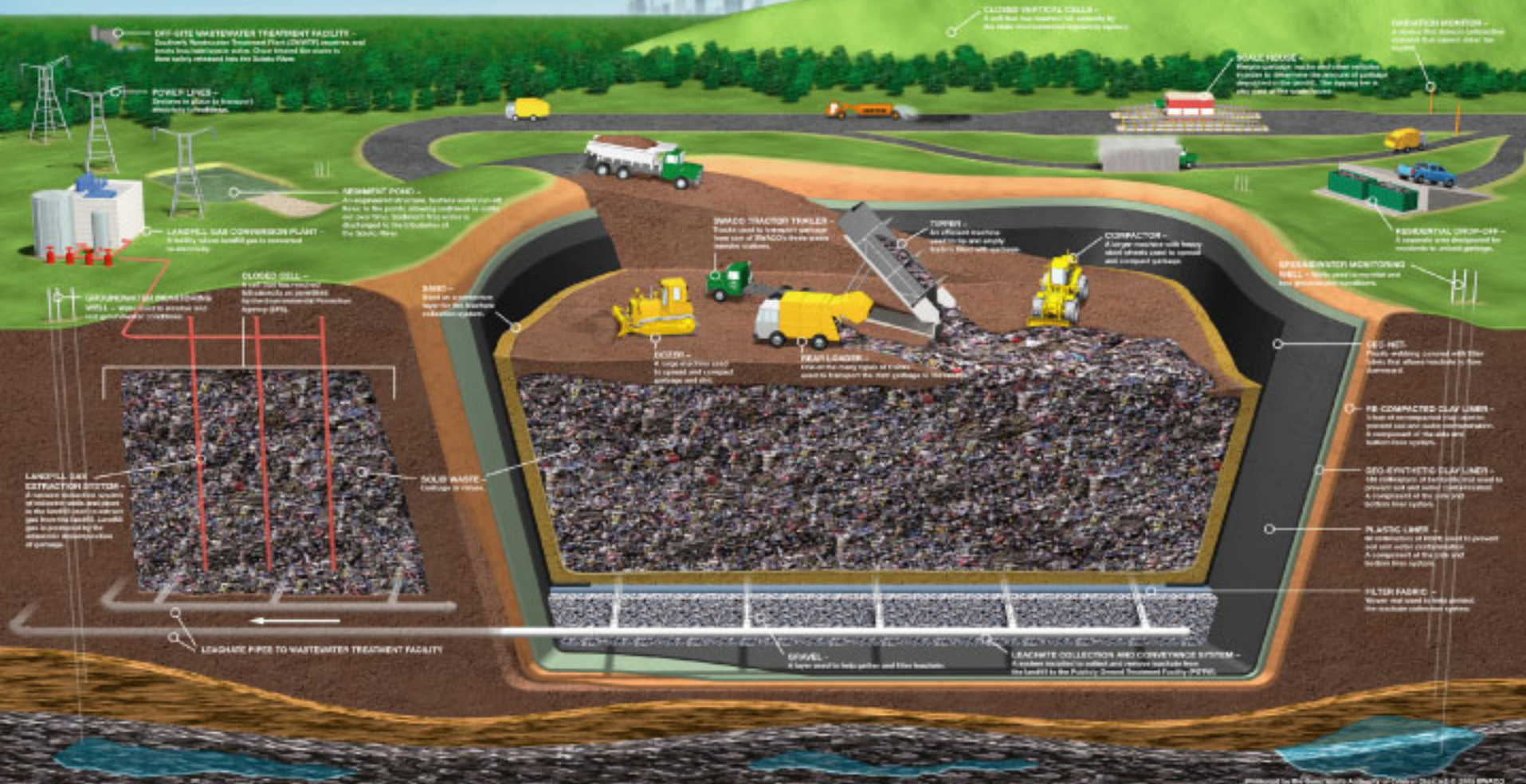
The bottom and sides of the landfill are lined with more clay or a plastic liner. This lining is intended to prevent water that has been exposed to the waste (this liquid is called leachate) from escaping into the environment.

# Landfills are growing across the world cities1

## As South Africa develops, consumption and trash increases



# MODERN LANDFILL



# Government's Environmental Policy

?



?



?



?





# Government's Environmental Policy

## Fuel Standards



## Recycling



## Tax Credits (coupon)



## Pollution Limits



**QUESTION 5:** In your opinion, which environmental policy below will be most effective? Why

**# 1- Recycling-** limits waste going into landfills

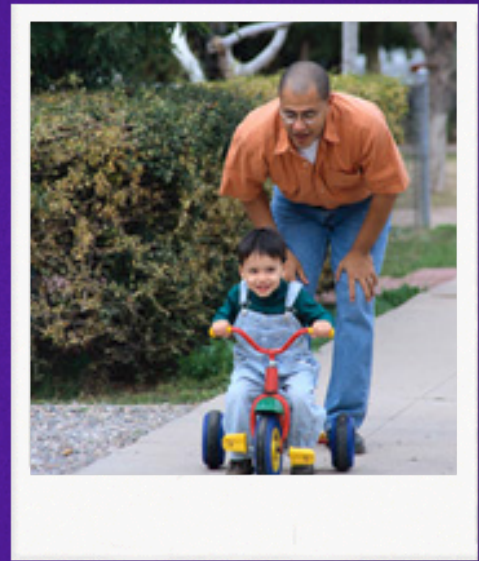
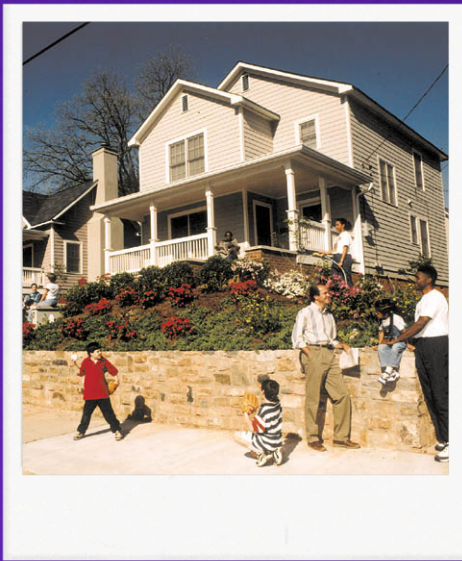
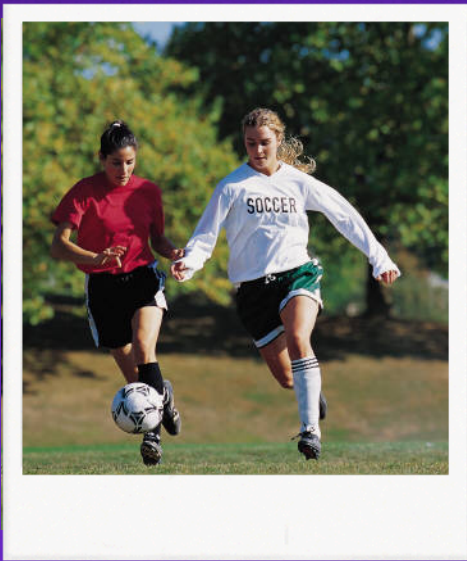
**# 2- Fuel Standards-** cars have to run a set limit of miles per gallon

**# 3- Pollution Limits-** sets a number limit on amount of pollution a company can create during production

**#4- Tax Credits-** Companies that have environment friendly policies get a credit (coupon) on taxes. They are taxed less by Govt

# Smart Growth

More Choices For Our Families

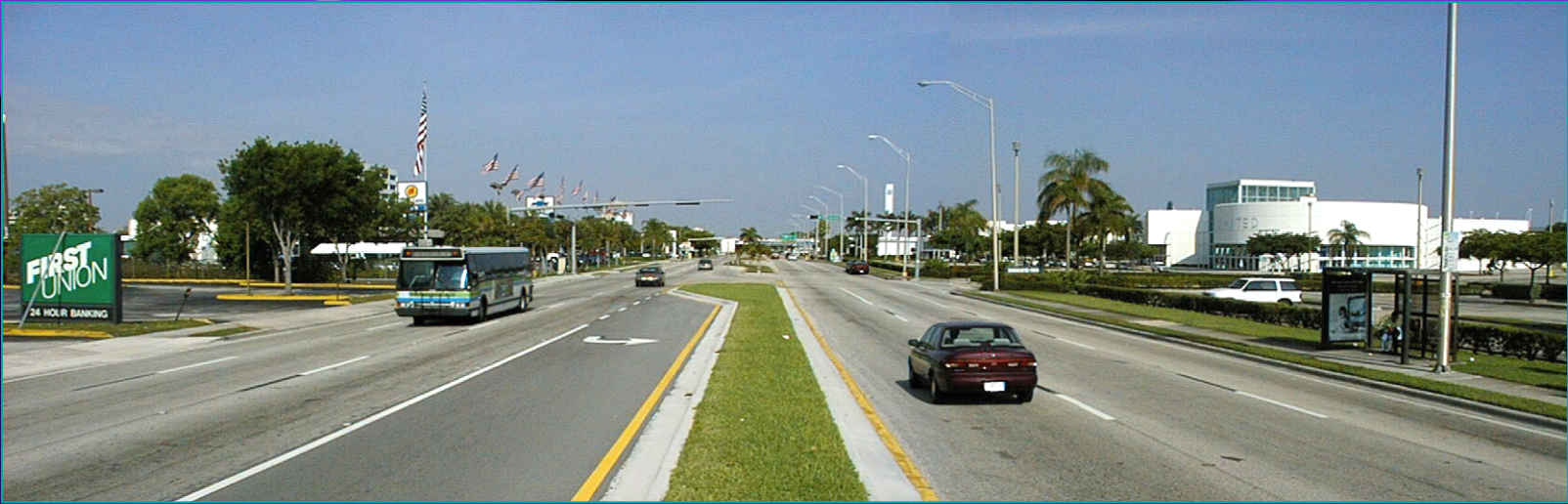


# Let's Start With Definitions

**Sprawl** is irresponsible development that takes our tax dollars away from our community and destroys farmland and open space.

Smart Growth is well-planned development that keeps tax dollars in our communities and provides more choices for our families.

# Sprawl Vs. Smart Growth



Sm  
More Choices For Our Families

Smart Growth  
America

# Why Do People Prefer Smart Growth?

**Sprawl Creates  
Traffic  
Congestion**



# Soccer Moms Become Cab Driver Moms

**Everything is a Drive Away**

School

Shops

Home

Suburban mothers spend  
**17 full days a year**  
behind the wheel, more than the  
average parent spends dressing,  
bathing and feeding a child

Source: Surface Transportation Policy Project

Recreation

Workplace



# Why Do People Prefer Smarter Growth?

**Smart Growth Provides More Transportation Choices**





# Why Do People Prefer Smart Growth?

**Sprawl Provides  
Few or No Options  
for Pedestrians  
and Cyclists**



# Why Do People Prefer Smart Growth?

**Smart Growth  
Allows Farmers and  
Communities to  
Save Farmland**



# Why Do People Prefer Smart Growth?

**Sprawl  
Consumes  
Open Space**



# Why Do People Prefer Smart Growth?

**Smart  
Growth  
Costs  
Less**

<b>Roads</b>	<b>25% less</b>
<b>Utilities</b>	<b>15% less</b>
<b>Schools</b>	<b>5% less</b>

*Source: Economic and Fiscal Impacts of Alternative Land Use Patterns, by Robert Burchell, Rutgers University*

# Why Do People Prefer Smart Growth?

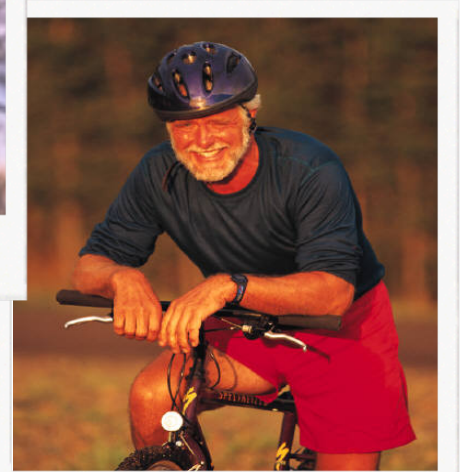
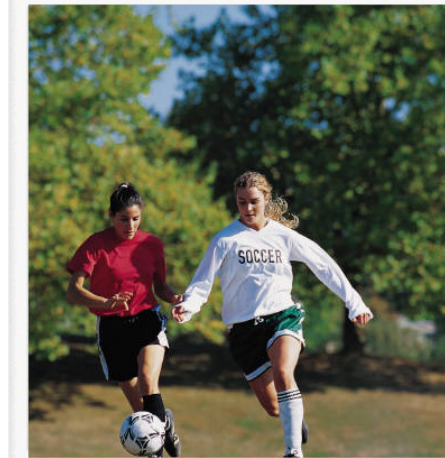
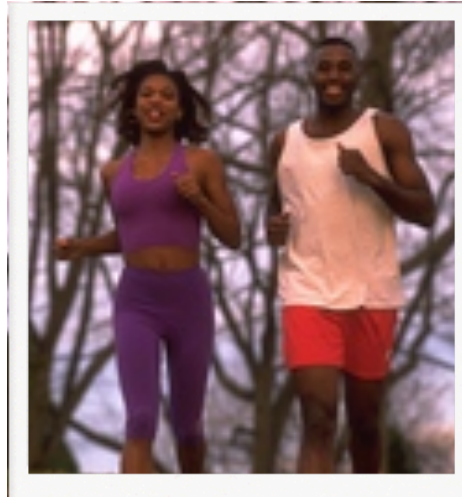
**Sprawl Pollutes the  
Environment and  
Harms Public Health**

**In 1997,  
approximately  
113 million  
people  
lived in counties  
that had unhealthy  
air quality**

**Source: U.S. Environmental  
Protection Agency**

# Why Do People Prefer Smart Growth?

**Smart Growth  
Protects the  
Health of People  
and the  
Environment**

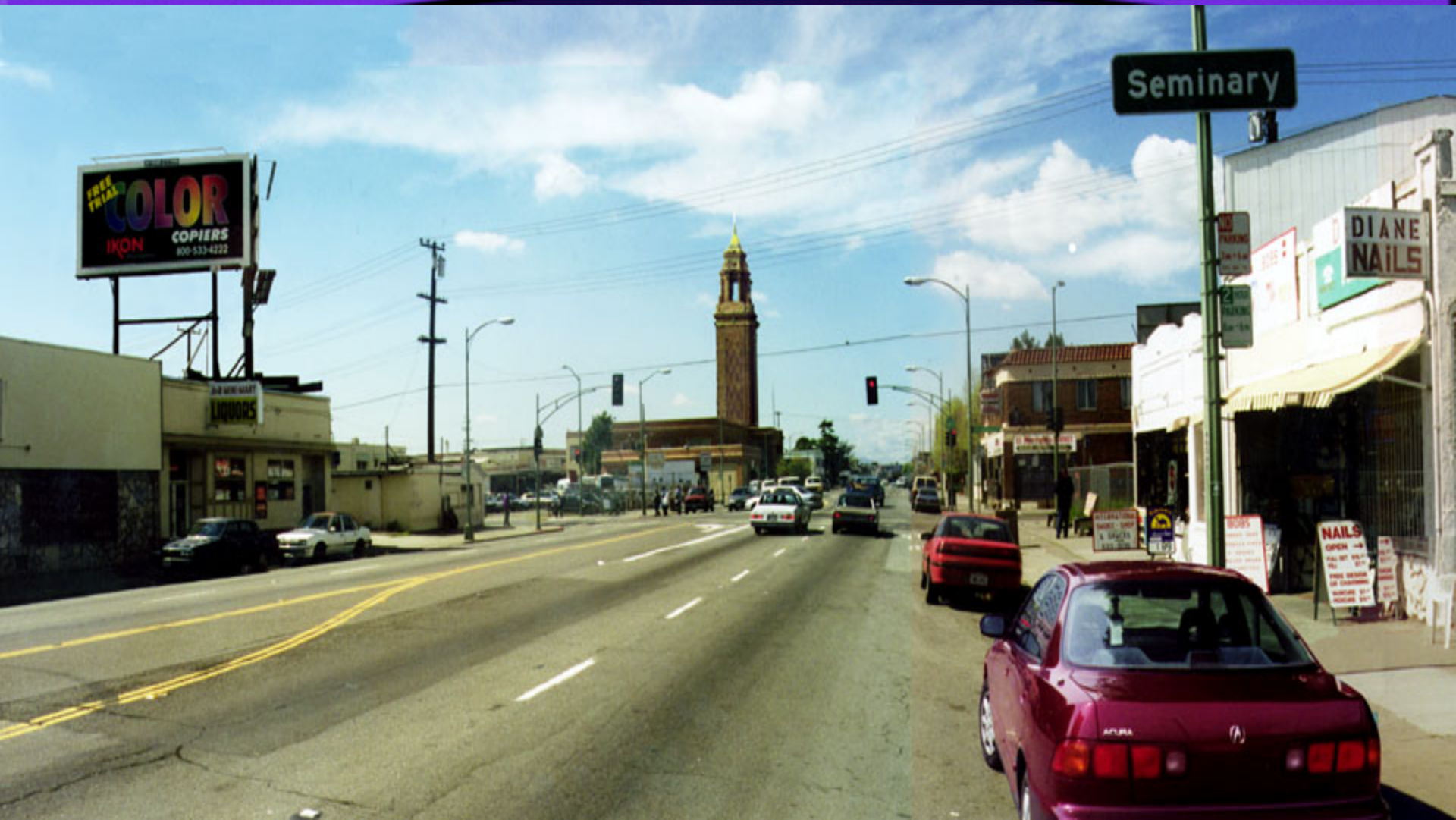


# Why Do People Prefer Smart Growth?

**Sprawl Takes  
Resources Away  
from Our  
Communities**



# Smart Growth Achieves the Right Balance



Sm  
More

**Smart Growth Enhances (grows) Our Communities!!**



# Smart Growth Achieves the Right Balance



Sm  
More

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# Smart Growth Achieves the Right Balance



Sm  
More

**Smart Growth Enhances (grows) Our Communities!!**

# QUESTION

**How could Smart Growth policies help dense country like Japan??**