Film Guide for Educators

Designing for Safety
Designing For Safety

Key Concepts

Speeding While Driving

Speeding is the number one cause of injuries and deaths from driving. The main reasons are because speeding drivers have less time to react to avoid collisions, and tend not to yield the right-of-way. Speeding has serious consequences when a pedestrian is involved. At higher speeds, drivers are less likely to see a person walking, and are even less likely to be able to stop in time to avoid hitting one. According to a UK Department of Transportation report, “Killing Speed and Saving Lives” a pedestrian hit at 40 mph has an 85% chance of being killed, at 30 mph, a 45% chance of being killed, and at 20 mph, the likelihood drops down to 5%.

Speed Limits In The City

Pedestrian crashes occur most frequently in urban areas. The National Safety Council estimates that 86% of all non-fatal pedestrian crashes in the United States occur in urban areas and 14% occur in rural areas. Seventy-two percent of all pedestrian fatalities in 2003 occurred in urban areas. Properly enforced speed limits can make cities considerably safer for pedestrians.

Road diets redesign streets for safety

Streets are a significant proportion of our public space. For example, in New York City, streets and sidewalks make up 80% of New York’s public space. Yet, because such a large proportion of that public space is devoted to privately-owned vehicles, pedestrians and cyclists often resort to competing over the space that is left, and are less safe as a result (for example, if streets are unsafe for cyclists, they are much more likely to ride on sidewalks and injure pedestrians). A road diet has the potential to “slim down” the extra spaces that are unnecessarily devoted to cars, in exchange creating wider sidewalks, medians, public plazas, and bike lanes, which make pedestrians and cyclists safer and more comfortable on the street.

Films in this Lesson

- Traffic Calming
- Road Diet

Included Worksheets

- When Cars Speed
PRE-SCREENING ACTIVITIES:
Putting it in Context

Before you watch the films, here are some discussion strategies to provide context for your students.

Speeding and You

Discuss speeding and the factors that influence why people speed. Distribute the “When Cars Speed...” handout and have students fill out the chart based on the bar graph. Then have a conversation about speeding. Questions to include:

- What are the factors that influence why we might speed?
- Is speeding a problem in the area around our school? Is it an issue in the neighborhood where you live? Are there certain streets and intersections where speeding is worse? Why?
- Whose responsibility is it to slow down speeding cars: drivers, police officer, urban planners, or someone else?

Weigh in Your Opinion

Explain to the students that you are doing a “human barometer” activity and need to clear away desks and stand up. You will read each statement to the class and then students need to pick a side of the room. Establish a corner for AGREE, one for DISAGREE and a point in the center for MIXED.

We have provided you with suggested questions. We recommend that you select three from this list in order to build in enough time for a full class conversation about the issue. Please do not read all of the questions listed below to your students unless you can build extra time into your class session. After each question, have students choose whether they AGREE, DISAGREE, or are in the middle, in which case they go to MIXED. They should walk towards the side of the class with which they most identify. Please select from the following questions:

- When it comes to safe street design and access to affordable transportation, some neighborhoods are treated better than others.
- The dangers of bicycling far outweigh the health benefits.
- People need to own a car in my community in order to get around.
- It is the responsibility of traffic engineers to reduce the number of speeding cars and crashes.
- There are issues in my community that are much more important than car crashes.

You should then facilitate a discussion about why students chose to stand where they did. We know that a conversation about these questions could get heated - make sure to clarify the ground rules for a discussion and students feel they can comfortably voice their opinion.

Once the students have had a conversation about each question, have a wrap up discussion for a few minutes.
Film Synopses and Discussion Questions

The following films deal with safety and streets designed to slow car speeds and allocate space away from automobile traffic.

Traffic Calming

Explores the various strategies employed and infrastructure built by cities to reduce car traffic and improve the overall health, safety, and environmental impact of a transportation network. Case Study: Hoboken.

- What are some of the strategies used by urban planners to address reckless driver behavior? What about speeding in particular?
- What kinds of infrastructure can slow speeding cars?
- How does traffic calming improve the health, safety, and environmental impact of a transportation network?
- How has Hoboken implemented traffic calming measures?
- Do you think your community needs traffic calming? Why or why not?

Road Diet

Examines the process of allocating road space away from automobile traffic to accommodate more sustainable modes of transportation such as BRT, bicycle infrastructure and pedestrian plazas. Taking away car traffic also creates safer streets. Case Study: San Francisco.

- What do proponents say are the benefits of a road diet?
- How does taking lanes of traffic away from cars make pedestrians and cyclists safer?
- Given that road space is limited, how do you think we can best accommodate plans for bicycle infrastructure and pedestrian plazas, without taking away too much space from buses, for example?
- What does the story of San Francisco teach us about the pros and cons of a road diet in that city?
- Can you think of a street in need of a road diet in your community? If yes, why that street? If no, why not?

Concluding Questions

- Are you convinced that speeding drivers need to slow down in the area outside of schools? Why or why not?
- Do you think that traffic calming and road diets are the most effective ways to slow speeding drivers?
- Who should be responsible for slowing down speeding car traffic?
- How would you slow down drivers?
POST-SCREENING ACTIVITIES:
Making the Connection

Is speeding a problem in my neighborhood?

Activity: Interviews About Speeding
Worksheet: When Cars Speed...

Decide as a class how you will conduct research about speeding in the area. Your students should interview adults they know and trust, such as family members, neighbors, and community leaders, about speeding near their home. We encourage students to conduct interviews with the elderly, who are often most vulnerable to speeding cars and may have a useful perspective. Here are some suggested questions for interviews:

• Do you think speeding is a problem in your neighborhood? Why or why not?
• Is there a particular street you know of that has a problem with speeding cars? Why do you think speeding is a problem there?
• Do you feel like cars speed on your street?
• Who is responsible for slowing down speeding cars?
• How can we make streets safer (in all ways, not just in terms of speeding cars)?

Students should come back with the results of their interviews and compare their responses to those of their family members, peers, and neighbors. Students can also create a poll to distribute to students in the school and tally results. As part of a follow-up conversation, they can compare the qualitative and quantitative results, or differences between neighborhoods.

Further Resources


Activity: Case Study of New York City’s “That’s Why It’s 30” Campaign
Website: www.nyc.gov/html/dot/html/about/knowthespeedlimit.shtml

Go to the above website to learn about NYC DOT’s campaign to slow speeding drivers.

• Make sure they also read the section titled “Campaign Background” at the bottom of the page
• Ask students to view the “That’s Why it’s 30” billboard advertisement and YouTube videos made for television

Discuss this campaign as a class. Below are some suggested questions for discussion:

• Do you think this campaign is convincing?
• According to the website, the Department of Transportation found that the vast majority of New Yorkers “were unaware of New York City’s speed limit, and that nearly all of the drivers sped.” Do you think this is a problem in your community? Why or why not?
• What do you think governments should do to reduce fatalities from speeding cars?
When Cars Speed...

Car Crashes in Urban Areas

Pedestrian crashes occur most frequently in urban areas. The National Safety Council estimates that 72% percent of all pedestrian fatalities in 2003 occurred in urban areas.

Speeding is the Main Problem

When it comes to urban traffic safety there is one major concern: speeding.

Why? Because speeding motorists...
1. Have less time to react to avoid collisions
2. Tend not to yield the right-of-way
3. Cause more deaths and injuries

How does speeding have serious consequences when a pedestrian is involved? Write your answer below:

Using the graph, fill in the information below:

**Fatalities Based on Speed of Vehicle**

<table>
<thead>
<tr>
<th>Speed of Vehicle</th>
<th>Pedestrian's Chance of Death</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 mph</td>
<td>90%</td>
</tr>
<tr>
<td>30 mph</td>
<td>80%</td>
</tr>
<tr>
<td>40 mph</td>
<td>70%</td>
</tr>
</tbody>
</table>

A pedestrian hit at 40 mph has a(n)

___________% chance of being killed

At 30 mph, the likelihood goes down to

___________%

At 20 mph, the fatality rate is only

___________%

Sources:
http://www.transalt.org/newsroom/testimony/1862
http://www.walkinginfo.org/pedsafe/crashstats.cfm