

CERCA SET **Railway Infrastructure**
English Language Arts

What factors should the U.S. government take into account when making decisions about investing in rail infrastructure?

LESSON TITLE **Should the U.S. Build a High-Speed Rail System?**

CERCA QUESTION **Should more states build high-speed rail systems?**

RESOURCES

- **Build Background Knowledge**
<https://www.pinterest.com/thinkcerca/railway-infrastructure-cerca-set-board/>
- **CERCA Framework**
- **Vocabulary Routine**
- **Speaking and Listening Routines**

Whole group	Online
Small group	Offline
Individual activity	Activity time period
Speaking and listening activity	Audio
Available in English and Spanish	

Introduce the CERCA Question



Introduce the question by asking students how often they use the train. Ask them how important they think train travel is and how to make it most useful to the largest number of people. Make sure that students understand what a high-speed rail system is, and that these kinds of systems are usually built by state or federal governments.

LEVEL 3-4 Expanding

► **ASK: Do you use trains to travel?**

Support language acquisition with the following sentence frame:

I [do/do not] use trains to travel because _____.

► **ASK: Do you think that trains are important to our community? Why or why not?**

Trains [are/are not] important to our community because _____.

1 Connect



Have students log in to ThinkCERCA and click into this lesson.

LEVEL 3-4 Expanding

Read the overview aloud and discuss vocabulary. Then read the writing prompt aloud for students before they answer.

Complete Step 1: Connect.

Introduce Vocabulary



Use **Semantic Webbing** to introduce vocabulary.

► **NOTE:** Some students will need support for additional words not listed on the student support page. Weave them into the instruction.

LEVEL 3-4 Expanding

Assign vocabulary words to small groups, or to partners. For small groups, assign a word and have them map it out on the whiteboard. Depending on student familiarity with the vocabulary words you can create webs for all new words, or just the most challenging words. When they are finished they can take a minute to explain it while classmates copy the map down. For partner work, have mixed ability pairs create maps for all assigned words in their notebooks.

After the routine have students add the focus words to their word notebooks.

LEVEL 4-5 Bridging

Ask students to discuss what they already know about train travel and what they would like to learn about train travel.

LEVEL 4-5 Bridging

Complete Step 1: Connect.

LEVEL 4-5 Bridging

Have students work in pairs to write their own definition of the word in English. Next, have them brainstorm an image or mental picture to illustrate each word.

After the routine have students add the focus words to their word notebooks.


Introduce the Summary

En | Sp




Remind students that this is a summary for the passage they will read. Point out the Vocabulary as you read.

LEVEL 3-4 Expanding

 Have students read the Spanish version on the student support page, if applicable, before you read the summary aloud and have students follow along.

LEVEL 4-5 Bridging


 Ask a student to read aloud the summary in English to practice their fluency.


2 Read




Have students read the text, using Vocabulary from the student support page as appropriate.


LEVEL 3-4 Expanding


 Read comprehension questions with students before they begin reading the passage.

 Complete Step 2: Read.

 Discuss comprehension questions. Point out key vocabulary words in the text, especially as they are relevant to finding answers.

LEVEL 4-5 Bridging

 Complete Step 2: Read.

 Discuss comprehension questions. Point out key vocabulary words in the text, especially as they are relevant to finding answers.


3 Engage with the Text




NOTE: If you have concerns that your students are struggling with comprehension, you may wish to work with them on Step 4: Summarize before Step 3: Engage with the Text.


LEVEL 3-4 Expanding


 Model highlighting the text for students.

 Complete Step 3: Engage with the Text.

 Use the following sentence frames to discuss the highlights students made.
One benefit of high-speed rail travel is _____. _____ would benefit most from this.
One downside of high-speed rail travel is _____. _____ would experience the most disadvantage from this.

LEVEL 4-5 Bridging

 Complete Step 3: Engage with the Text.

 Discuss the highlighting students did. Ask students to share their highlights and notes, and use the following sentence stems to support student engagement in the conversation.

_____ and _____ are benefits of high-speed rail travel, which would help _____ most.
On the other hand, _____ and _____ are both potential downsides to high-speed rail travel. These would affect _____ most.

4 Summarize



Prepare students to write a CERCA by having them summarize the text.

LEVEL 3-4 Expanding

Complete a summary of the article together using either the suggested sentence frames below or the stems in the product. Encourage students to use Vocabulary from the lesson.

Use the following sentence frames to create a summary.

High-speed rail travel is _____ and offers many benefits, like _____.

However, there are some downsides, such as _____.

In California, high-speed rail is _____.

Even so, people are still considering whether _____.

Complete Step 4: Summarize.

LEVEL 4-5 Bridging

Complete Step 4: Summarize.

Review the summaries to ensure that all students understand the big ideas of the passage. Encourage students to use Vocabulary from the lesson.

5 Build Your Argument



Practice creating a CERCA together using the CERCA graphic organizer (online or offline) and the leveled frames below and on the student support pages. Remind students that some of their evidence can come from their highlighting work.

NOTE: You may wish to have students orally respond to the CERCA question using a Listening and Speaking Routine instead of writing a response.

LEVEL 3-4 Expanding

Use the following sentence frames to complete the CERCA graphic organizer.

Claim *More states [should/should not] build high-speed rail systems*

Reason *because _____.*

Evidence *Travel by high-speed rail can have the [advantage/disadvantage] of _____.*

Reasoning *which makes it [possible/difficult] to _____.*

Counterargument *It may seem that the costs of high speed rail is [worthwhile/not worthwhile]. However, that ignores the fact that _____.*

Complete Step 5: Build Your Argument.

LEVEL 4-5 Bridging

Have students share their thoughts with the group.

Use the following sentence frames to complete the CERCA graphic organizer.

Claim *More states [should/should not] invest in building high-speed rail systems*

Reason *because _____.*

Evidence *Travel by high-speed rail can _____.*

Reasoning *which makes it _____.*

Counterargument *It may seem that the costs of high speed rail is _____.* However, _____.

Evidence *Travel by high-speed rail can _____.*

Reasoning *implying that _____.*

Have students complete the graphic organizer with at least one more piece of evidence and associated reasoning. Assist as needed.

Complete Step 5: Build Your Argument.

6 Create Your CERCA



Have students write their CERCA in the lesson online so that you can provide feedback and monitor growth.

► **NOTE:** Remind students that they can use the Copy all button to move their work into the text box.

LEVEL 3-4 Expanding

Use the responses students made in the graphic organizer to model writing in response to the CERCA question.

Have students reread their draft. Then have them submit to complete Step 6: Write Your CERCA.

LEVEL 4-5 Bridging

Have students write their CERCA. Provide support as necessary. Remind students that they can use vocabulary words as they write.

Use this sentence frame to help students conclude their CERCA:
When considering the benefits and downsides of high-speed rail, it is most important to consider _____.

Have students add a conclusion and then reread their draft. Then have them submit to complete Step 6: Write Your CERCA.

Complete Speaking and Listening Activities



Complete a whole group speaking and listening activity with all students who completed the grade level lesson. Prompt students to use the vocabulary from the passage in the activity.

LEVEL 3-4 Expanding

Do the **Think-Pair-Share** activity.

LEVEL 4-5 Bridging

Do the **Think-Pair-Share** activity.

Modify this activity by having students start with simple partner talk and then expand to small group discussion (4-6 students).

Should the U.S. Build a High-Speed Rail System?

Should more states build high-speed rail systems?

Vocabulary

Amtrak (proper noun): the National Railroad Passenger Corporation, which receives some funding from the U.S. government and provides passenger service between many cities in the continental United States

bustling (adj.): busy

*debate (noun): a discussion of different sides of an issue

*efficient (adj.): without wasting time or energy

*federal (adj.): relating to the national government

geothermal (adj.): relating to the internal heat from the Earth

hydroelectric (adj.): created by converting water into power

maintenance (noun): the work that is needed to keep something in good working order

siting (verb): building something in a particular place

*stimulate (verb): cause increased activity

Should the U.S. Build a High-Speed Rail System?

Should more states build high-speed rail systems?

Summary

High-speed rail is a part of everyday life in many parts of the world. But in the United States, there is only one train that even gets close to high-speed rail. In a 2010 poll, nearly 60 percent of Americans favored improving the rail system. Both Republicans and Democrats favored high-speed rail over air travel. President Obama has called for a national high-speed rail system. In 2012, he set aside \$3.3 billion in federal funds for fast trains in California. California is the only place in the United States that has plans for high-speed rail. The state is building a 520-mile high-speed train line from San Francisco to Los Angeles. It is scheduled to be completed in 2028 and to cost a total of \$68 billion. Some people object to this plan and would prefer the investment be made into more highways and airport runways. But high-speed rail offers many advantages, too. It offers relief from traffic jams and does not depend on good weather. Accidents are rare. And since high-speed trains are electric, they can use wind, solar, geothermal, or hydroelectric energy. Using these kinds of clean energy is good for air quality. Despite the possible benefits, the future of high-speed trains in the United States is still unknown. As California builds its high-speed rail system, the rest of the country will be watching closely.

Should the U.S. Build a High-Speed Rail System?

Should more states build high-speed rail systems?

¿Más estados deberían construir sistemas de tren de alta velocidad?

Vocabulary

English

Amtrak

(proper noun): the National Railroad Passenger Corporation, which receives some funding from the U.S. government and provides passenger service between many cities in the continental United States

bustling

(adj.): busy

*debate

(noun): a discussion of different sides of an issue

*efficient

(adj.): without wasting time or energy

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(adj.): relating to the national government

geothermal

(adj.): relating to the internal heat from the Earth

hydroelectric

(adj.): created by converting water into power

maintenance

(noun): the work that is needed to keep something in good working order

siting

(verb): building something in a particular place

*stimulate

(verb): cause increased activity

Español

Amtrak

(sustantivo propio): la Corporación Nacional de Pasajeros de Ferrocarriles, que recibe algunos fondos del gobierno de los Estados Unidos y ofrece un servicio para pasajeros entre muchas ciudades de la zona continental de los Estados Unidos

bullicioso

(adjetivo): con mucha gente

*debate

(sustantivo): una discusión de los diferentes aspectos de un tema

*eficiente

(adjetivo): sin perder tiempo ni energía

*federal

(adjetivo): relacionado con el gobierno federal

geotérmico

(adjetivo): relacionado con el calor interno de la Tierra

hidroeléctrico

(adjetivo): creado mediante la conversión de agua en energía

mantenimiento

(sustantivo): el trabajo que se necesita para mantener algo en buen estado de funcionamiento

emplazar

(verbo): construir algo en un lugar determinado

*estimular

(verbo): ocasionar un aumento en la actividad

Should the U.S. Build a High-Speed Rail System?

CERCA QUESTION Should more states build high-speed rail systems?

¿Más estados deberían construir sistemas de tren de alta velocidad?

Summary

English High-speed rail is a part of everyday life in many parts of the world. But in the United States, there is only one train that even gets close to high-speed rail. In a 2010 poll, nearly 60 percent of Americans favored improving the rail system. Both Republicans and Democrats favored high-speed rail over air travel. President Obama has called for a national high-speed rail system. In 2012, he set aside \$3.3 billion in federal funds for fast trains in California. California is the only place in the United States that has plans for high-speed rail. The state is building a 520-mile high-speed train line from San Francisco to Los Angeles. It is scheduled to be completed in 2028 and cost a total of \$68 billion. Some people object to this plan and would prefer the investment be made into more highways and airport runways. But high-speed rail offers many advantages, too. It offers relief from traffic jams and does not depend on good weather. Accidents are rare. And since high-speed trains are electric, they can use wind, solar, **geothermal**, or **hydroelectric** energy. Using these kinds of clean energy is good for air quality. Despite the possible benefits, the future of high-speed trains in the United States is still unknown. As California builds its high-speed rail system, the rest of the country will be watching closely.

Español Los trenes de alta velocidad son parte de la vida cotidiana en muchas partes del mundo. Pero en los Estados Unidos, sólo hay un tren que se acerca a los trenes de alta velocidad. En una encuesta de 2010, casi el 60 por ciento de los estadounidenses estuvieron a favor de la mejora del sistema ferroviario. Tanto republicanos como demócratas favorecían el tren de alta velocidad por sobre los viajes aéreos. El presidente Obama ha planteado la posibilidad de un sistema nacional de ferrocarriles de alta velocidad. En 2012, separó \$3.3 mil millones en fondos federales para los trenes de alta velocidad en California. California es el único lugar en los Estados Unidos que tiene planes para construir trenes de alta velocidad. El estado está construyendo una línea de tren de alta velocidad de 520 millas desde San Francisco a Los Ángeles. Está programado completarse en el año 2028 y a un costo total de \$68 mil millones. Algunas personas objetan este plan y preferirían que la inversión se destinara a más carreteras y pistas de aeropuertos. Pero el tren de alta velocidad ofrece muchas ventajas también. Ofrece un alivio de los atascos de tráfico y no depende de un buen clima. Los accidentes son raros. Y puesto que los trenes de alta velocidad son eléctricos, pueden utilizar energía eólica, solar, **geotérmica** o **hidroeléctrica**. El uso de este tipo de energía limpia es bueno para la calidad del aire. A pesar de los posibles beneficios, el futuro de los trenes de alta velocidad en los Estados Unidos es aún incierto. Mientras California construye su sistema ferroviario de alta velocidad, el resto del país estará observando muy de cerca.

Should the U.S. Build a High-Speed Rail System?

Should more states build high-speed rail systems?

4 Summarize

High-speed rail travel is _____ and offers many benefits,

like _____.

However, there are some downsides, such as _____.

In California, high-speed rail is _____.

Even so, people are still considering whether

_____.

5 Build Your Argument

Claim *More states [should/should not] build high-speed rail systems*

Reason *because _____.*

Evidence *Travel by high-speed rail can have the [advantage/disadvantage] of _____*

Reasoning *which makes it [possible/difficult] to _____.*

Counterargument *It may seem that the costs of high speed rail is [worthwhile/not worthwhile]. However, that ignores the fact that*

_____.

Should the U.S. Build a High-Speed Rail System?

Should more states build high-speed rail systems?

5 Build Your Argument

Claim *More states [should/should not] invest in building high-speed rail systems*

Reason *because* _____.

Evidence *Travel by high-speed rail can* _____,

Reasoning *which makes it* _____.

Counterargument *It may seem that the costs of high speed rail is*

_____.

However, _____.

Evidence *Travel by high-speed rail can* _____,

Reasoning *implying that* _____.

6 Create Your CERCA

When considering the benefits and downsides of high-speed rail,

it is most important to consider _____.