

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 **Two Opinions on US Rail**

CERCA QUESTION What is the most important factor when considering public transportation solutions in the United States?

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



Make sure students understand the term “public transportation.” You can support understanding with visuals if public transportation isn’t commonly used in your area. Make sure students understand the words *factor* and *solutions*.

1 Connect



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

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

▶ **ASK:** What are some factors that you might use in deciding what movie to see this weekend?

Support language acquisition with the sentence frame:

One factor I would use to decide what movie to see is

_____.

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.

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

Name a relatively straightforward problem in your community, such as preventing litter or the need for a new school gym. Have students brainstorm some possible solutions to this problem. Prompt them to think about the factors that would be involved in choosing the best solution (cost, speed, effectiveness, etc.)

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



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.
The fact that _____ supports Kauffman's claim about the future of public transportation.
However, _____ supports Altizer's claim.

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.

Kauffman writes, "_____,," which supports his claim. Readers can infer from that fact that _____.
On the other hand, Altizer cites _____ to support her claim. From that, readers can infer _____.

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.

One major issue surrounding public transportation is _____.

In the first article, author Brian Kauffman argues that public transportation _____.

However, in the second article, author Megan Altizer states that _____.

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 _____ **is the most important factor to think about when considering improvements to public transportation systems**

Reason because _____.

Evidence *Kauffman argues that public transit systems can create* _____,

Reasoning *which means that people are able to* _____.

Counterargument *It may appear that* _____ *. However, it actually* _____.

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 _____ **is the most crucial factor to consider regarding improvements to public transportation systems**

Reason because _____.

Evidence *According to Kauffman, public transit systems can create* _____,

Reasoning *which means that people are able to* _____.

Counterargument *It may appear* _____ *. However,* _____.

Evidence *Megan Altizer states that the advantages of public transit systems such as* _____ *include* _____

Reasoning *by allowing for* _____.

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:
Improving public transport systems will require _____ and _____.

 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).

LESSON **Two Opinions on U.S. Rail**

CERCA QUESTION What is the most important factor when considering public transportation solutions in the United States?

Vocabulary

accommodate (verb): provide what is needed

BTU (adj.): British thermal unit; the amount of energy needed to raise the temperature of one pound of water by one degree Fahrenheit

*budget (noun): a plan used to decide the amount of money that can be spent and how it will be spent

comparable (adj.): almost the same or similar

congestion (noun): blockage; jam

*consumption (noun): the use of something in a way that it can't be used again

derive (verb): take from

economically (adv.): in ways related to money

economic stimulus efforts (noun): a series of government programs to help the economy grow

exporting (verb): sending a product from one country to another

*fluctuations (noun): changes

forefront (noun): the most important part

Vocabulary continued

grappling (verb): struggling

*impacts (noun): effects

*implemented (verb): made something active

infrastructure (noun): the physical framework or structure of something complex such as a system or a building

*innovative (adj.): new and useful

intensity (noun): strength

mass transit (noun): public transportation, especially in cities

minimetros (noun): a public transportation system in Perugia, Italy, that features small train cars designed to travel easily among Perugia's hilly landscape

*novel (adj.): new

straddling bus (noun): an extra tall and extra wide bus proposed for Shenzhen's public transportation system. Cars could drive underneath the bus, as if the bus were a moving tunnel. The design is intended to ease traffic by allowing cars and buses to share road space efficiently.

strikingly (adv.): unusually

virtually (adv.): almost

Summary

This article offers two perspectives on the best way to improve public transportation systems in the United States. The first perspective states that investing in high-speed train travel is a good idea, only if trains will actually be full. The main issue is not so much the investment but rather truly encouraging people to use the trains. The second perspective discusses the importance of innovation and developing specific transportation solutions for the needs of specific places. Solutions such as minimetros in Italy and “straddling buses” in China could provide the response to the transport needs in these places. Innovative ideas could possibly be applied later to other cities, if the ideas meet the local needs.

LESSON TITLE **Two Opinions on US Rail**

CERCA QUESTION What is the most important factor when considering public transportation solutions in the United States?

¿Cuál es el factor más importante al considerar las soluciones de transporte público en los Estados Unidos?

Vocabulary

English

accommodate

(verb): provide what is needed

BTU

(noun): British thermal unit; the amount of energy needed to raise the temperature of one pound of water by one degree Fahrenheit

***budget**

(noun): a plan used to decide the amount of money that can be spent and how it will be spent

comparable

(adj.): almost the same or similar

congestion

(noun): blockage; jam

***consumption**

(noun): the use of something in a way that it can't be used again

derive

(verb): take from

economically

(adv.): in ways related to money

economic stimulus efforts

(noun): a series of government programs to help the economy grow

exporting

(verb): sending a product from one country to another

***fluctuations**

(noun): changes

Español

adaptar

(verbo): proporcionar lo que se necesita

BTU

(sustantivo): Unidad Térmica Británica; la cantidad de energía necesaria para elevar la temperatura de una libra de agua en un grado Fahrenheit

***presupuesto**

(sustantivo): un plan utilizado para decidir la cantidad de dinero que se puede gastar y cómo se gastará

comparable

(adjetivo): que es casi igual o similar

congestión

(sustantivo): bloqueo; tráfico

***consumo**

(sustantivo): el uso de algo de una manera que no puede ser utilizado de nuevo

derivar

(verbo): provenir de algo

económicamente

(adverbio): en formas relacionadas con el dinero

esfuerzos de estímulo económico

(sustantivo): una serie de programas gubernamentales para ayudar al crecimiento de la economía

exportar

(verbo): enviar un producto de un país a otro

***fluctuaciones**

(sustantivo): cambios

Vocabulary continued

<p>forefront (noun): the most important part</p>	<p>primer plano (sustantivo): lo más importante</p>
<p>grappling (verb): struggling</p>	<p>aferrar (verbo): luchar por algo</p>
<p>*impacts (noun): effects</p>	<p>*impactos (sustantivo): efectos</p>
<p>*implemented (verb): made something active</p>	<p>*implementar (verbo): poner algo en marcha</p>
<p>infrastructure (noun): the physical framework or structure of something complex such as a system or a building</p>	<p>infraestructura (sustantivo): el marco físico o la estructura de algo tan complejo como un sistema o edificio</p>
<p>*innovative (adj.): new and useful</p>	<p>*innovador (adjetivo): nuevo y útil</p>
<p>intensity (noun): strength</p>	<p>intensidad (sustantivo): fuerza</p>
<p>mass transit (noun): public transportation, especially in cities</p>	<p>tránsito masivo (sustantivo): transporte público, especialmente en las ciudades</p>
<p>minimetros (noun): a public transportation system in Perugia, Italy, that features small train cars designed to travel easily among Perugia's hilly landscape</p>	<p>minimetros (sustantivo): un sistema de transporte público en Perugia, Italia, que cuenta con pequeños vagones de los trenes diseñados para viajar fácilmente entre las colinas de Perugia</p>
<p>*novel (adj.): new</p>	<p>*novedoso (adjetivo): nuevo</p>
<p>straddling bus (noun): an extra tall and extra wide bus proposed for Shenzhen's public transportation system. Cars could drive underneath the bus, as if the bus were a moving tunnel. The design is intended to ease traffic by allowing cars and buses to share road space efficiently.</p>	<p>autobús transzonal (sustantivo): un autobús muy alto y extra ancho propuesto para el sistema de transporte público de Shenzhen. Los automóviles podrían pasar debajo del autobús, como si el autobús fuera un túnel en movimiento. El diseño está destinado a facilitar el tráfico al permitir que los automóviles y autobuses compartan espacio vial eficientemente.</p>
<p>strikingly (adv.): unusually</p>	<p>sorprendentemente (adverbio): inusualmente</p>
<p>virtually (adv.): almost</p>	<p>virtualmente (adverbio): casi completamente</p>

LESSON TITLE

Two Opinions on US Rail

CERCA QUESTION What is the most important factor when considering public transportation solutions in the United States?

¿Cuál es el factor más importante al considerar las soluciones de transporte público en los Estados Unidos?

Summary

English This article offers two perspectives on the best way to improve public transportation systems in the United States. The first perspective states that investing in high-speed train travel is a good idea, only if trains will actually be full. The main issue is not so much the investment but rather truly encouraging people to use the trains. The second perspective discusses the importance of innovation and developing specific transportation solutions for the needs of specific places. Solutions such as minimetros in Italy and “straddling buses” in China could provide the response to the transport needs in these places. Innovative ideas could possibly be applied later to other cities, if the ideas meet the local needs.

Español Este artículo ofrece dos perspectivas sobre la mejor manera para mejorar los sistemas de transporte público en los Estados Unidos. La primera perspectiva afirma que la inversión en los trenes de alta velocidad es una buena idea, sólo si los trenes van a estar realmente llenos. El principal problema no es tanto la inversión, sino más bien que la gente verdaderamente se sienta alentada a utilizar los trenes. La segunda perspectiva analiza la importancia de la innovación y el desarrollo de soluciones de transporte específicas para las necesidades de lugares específicos. Las soluciones como minimetros en Italia y los "autobuses transzonales" en China podrían proporcionar la respuesta a las necesidades de transporte en estos lugares. Las ideas innovadoras posiblemente podrían aplicarse posteriormente a otras ciudades, si las ideas responden a las necesidades locales.

Two Opinions on U.S. Rail

What is the most important factor when considering public transportation solutions in the

4 Summarize

One major issue surrounding public transportation is

_____.

In the first article, author Brian Kauffman argues that public transportation _____.

However, in the second article, author Megan Altizer states that

_____.

5 Build Your Argument

Claim _____ *is the most important factor to think about when considering improvements to public transportation systems*

Reason *because* _____.

Evidence *Kauffman argues that public transit systems can create*

_____.

Reasoning *which means that people are able to*

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Counterargument *It may appear that* _____.

However, it actually _____.

Two Opinions on U.S. Rail

What is the most important factor when considering public transportation solutions in the

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include _____.

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6 Create Your CERCA

Improving public transport systems will require _____

and _____.