

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

LESSON TITLE **“Our Unwillingness to Fix Infrastructure Will Cost Us Dearly” ...**

CERCA QUESTION Which author most convincingly explains why U.S. infrastructure has fallen into disrepair?

READING	CCSS.RI.9-10.1
WRITING	CCSS.W.9-10.1

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
En Sp Available in English and Spanish	

Introduce the CERCA Question



Define infrastructure. Explain how it has typically been maintained in the United States (via tax dollars from the government), and briefly note some of the current problems with it (poorly maintained roadways, crumbling bridges and railways, etc.). Connect the adverb *convincingly* with the verb *convince*.

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 qualities of a convincing argument?**

Support language acquisition with the following sentence frame:

Persuasive arguments are characterized by _____. (Try to list 3 features.)

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

Have students brainstorm qualities of a convincing argument. What are some elements they use to convince others? What are some elements others have used to convince them?

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.
In the [first/second] article one piece of evidence offered that supports the idea that infrastructure in the United States is crumbling is _____.
In the [first/second] article one piece of evidence that helps explain why infrastructure in the United States is crumbling is _____.

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.

“ _____ ” is a quote from the [first/second] article that supports the idea that U.S. infrastructure is crumbling.
In the [first/second] _____ suggests that U.S. infrastructure is crumbling, and in need of immediate repairs.

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.

These two stories offer differing perspectives about _____.
In the first article, the author argues that the reasons U.S. infrastructure is crumbling are _____.
The second article the author concludes by stating that for U.S. infrastructure to be repaired properly _____ and _____ must happen.

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 _____ **most convincingly explains why the United States's infrastructure has fallen into disrepair**
Reason because _____.
Evidence **One of the strongest examples used was** _____,
Reasoning **which indicates that** _____.
Counterargument **While** _____ **offers many reasons why U.S. infrastructure is crumbling,** _____ **is more ultimately more convincing.**

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 _____ **most convincingly explains why the United States's infrastructure has fallen into disrepair**
Reason because _____.
Evidence **One of the strongest examples used was** _____,
Reasoning **which indicates that** _____.
Counterargument **While** _____ **offers many reasons why U.S. infrastructure is crumbling,** _____ **is more ultimately more convincing.**
Evidence **Elsewhere in the article** _____ **notes that** _____,
Reasoning **which is important because** _____.

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:
After weighing the two arguments regarding the issues with U.S. infrastructure, it is fair to say that _____ makes a more convincing argument because _____.

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).

Vocabulary

appalled (verb): shocked and horrified

artery (noun): a heavily-traveled road, railway, or river

*beleaguered (adj.): troubled

bias (noun): prejudice; favoritism

collective (adj.): as a group

corridor (noun): a traveled area between major cities

corrosion (noun): the chemical process of metal breaking down and weakening

currency (noun): money

deployed (verb): sent out to be used

derailed (verb): came off the tracks

embark (verb): start

entitlement (noun): financial help given by the government

Vocabulary continued

exploiters (noun): ones who take advantage of someone or something unfairly for personal gain

foreseeable (adj.): able to be thought of in advance

fundamental (adj.): basic

grid (noun): a network that supplies electricity to a large area

gross domestic product (noun): also called GDP; a measure of a country's economy that reflects its overall well-being; the total dollar value of all goods and services produced in a country over a specific period of time

implement (verb): put into effect

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

insufficient (adj.): not enough

investment (noun): the money given to build or improve something

main (noun): large underground pipe in a water system

mandate (noun): an official order; a requirement

manipulators (noun): ones who change things secretly to suit their own purposes

mitigated (verb): made a situation less serious

Vocabulary continued

*modernize (verb): update

oxymoronic (adj.): made up of a combination of words that have the opposite meanings

paramount (adj.): very important

pennywise, pound-foolish (idiom): inexpensive right now, but not completely adequate, and so costly in the long run

percolating (verb): slowly filtering through

permeable (adj.): allowing water to pass through

porous (adj.): containing many small holes, like a sponge

ports (noun): harbors where ships can stop for loading and unloading

proactive (adj.): responding to a potential problem before it becomes an actual problem

purse strings (idiom): access to financial resources

regard (noun): attention to; concern for

resilience (noun): the ability to withstand stress

revenue (noun): the money generated by the sale of a good or service; income

Vocabulary continued

share (noun): a portion

shortfalls (noun): shortages

*subsidize (verb): pay money to assist an industry

truss (noun): a strong beam that supports a bridge

underinvested (verb): not providing enough funding

wringing (verb): squeezing and twisting

LESSON “Our Unwillingness to Fix Infrastructure Will Cost Us Dearly” ...

CERCA QUESTION Which author most convincingly explains why U.S. infrastructure has fallen into disrepair?

Summary

Both articles discuss problems that have arisen due to Amtrak’s lack of funding, but each offers a unique perspective about the impact of poorly funded infrastructure.

One point of view:

According to journalist Ann McFeatters, decided she needed to experience for herself a train ride from D.C. to New York. In the wake of a fatal train derailment that claimed 8 people’s lives and injured more than 180 people, she wanted to understand what the experience was like. What she found appalled her and was indicative of other major issues related to the United States’s beleaguered national infrastructure. McFeatters is angry at Congress for insufficiently funding maintenance and collective indifference to the issue. She is also scared by the public’s lack of regard for infrastructure, as we all rely on it to keep the economy healthy. Citing numerous examples such as a failed bridge truss in Minneapolis and a lead paint issue in homeless shelters in D.C., it is clear we have many issues to address. How we go about loosening the purse strings to pay for it is less clear.

A second point of view:

In his article for The Philadelphia Inquirer, Robert Puentes reports that the United States has been underfunding infrastructure maintenance for decades. Compared to similarly developed peer nations like Canada and South Korea, the United States reinvests far less of its economic wealth in its infrastructure. For the foreseeable future this will be the case, as further budget cuts and shortfalls are predicted. In an effort to promote safety locally, some cities like Seattle are taking matters into their own hands and creating infrastructure programs. Regions that are affected by natural disasters have also begun demanding greater funds, as waterways and electric grids often were out for several days after storms. While many potential national solutions are percolating, nothing has been finalized. Puentes contends that for lasting change and complete modernization to come about, Congress needs to develop a long-term health plan and commit to fully funding it.

“Our unwillingness to fix infrastructure will cost us dearly” and “US has underinvested in infrastructure for decades”

Which author most convincingly explains why America’s infrastructure has fallen into disrepair?

¿Qué autor explica más convincentemente por qué la que la infraestructura estadounidense ha caído en el deterioro?

Vocabulary

English

appalled

(verb): shocked and horrified

artery

(noun): a heavily-traveled road, railway, or river

*beleaguered

(adj.): troubled

bias

(noun): prejudice; favoritism

collective

(adj.): as a group

corridor

(noun): a traveled area between major cities

corrosion

(noun): the chemical process of metal breaking down and weakening

currency

(noun): money

deployed

(verb): sent out to be used

Español

horrorizar

(verbo): conmocionar y espantar

arteria

(sustantivo): carretera, ferrocarril o río muy transitados

*asediado

(adjetivo): atormentado

parcial

(sustantivo): prejuicio; favoritismo

colectivo

(adjetivo): como un grupo

corredor

(sustantivo): una zona recorrida entre las principales ciudades

corrosión

(sustantivo): el proceso químico que el metal sufre al descomponerse y debilitarse

moneda

(sustantivo): dinero

desplegar

(verbo): enviar para utilizarse

Vocabulary continued

<p>derailed (verb): came off the tracks</p>	<p>descarrilar (verbo): salir de las vías</p>
<p>embark (verb): start</p>	<p>embarcar (verbo): iniciar</p>
<p>entitlement (noun): financial help given by the government</p>	<p>ayuda social (sustantivo): ayuda financiera otorgada por el gobierno</p>
<p>exploiters (noun): ones who take advantage of someone or something unfairly for personal gain</p>	<p>explotadores (sustantivo): personas que se aprovechan de alguien o de algo injustamente para obtener beneficios personales</p>
<p>foreseeable (adj.): able to be thought of in advance</p>	<p>previsible (adjetivo): algo en que se puede pensar de antemano</p>
<p>fundamental (adj.): basic</p>	<p>fundamental (adjetivo): básico</p>
<p>grid (noun): a network that supplies electricity to a large area</p>	<p>red (sustantivo): un sistema que suministra electricidad a un área grande</p>
<p>gross domestic product (noun): also called GDP; a measure of a country's economy that reflects its overall well-being; the total dollar value of all goods and services produced in a country over a specific period of time</p>	<p>producto interno bruto (sustantivo): también llamado PIB; una forma de medir la economía de un país, la cual refleja su bienestar general; el valor total en dólares de todos los bienes y servicios producidos en un país durante un período específico de tiempo</p>
<p>implement (verb): put into effect</p>	<p>implementar (verbo): poner en práctica</p>
<p>*infrastructure (noun): the physical framework or structure of something complex such as a transportation system</p>	<p>*infraestructura (sustantivo): el marco físico o la estructura de algo tan complejo como un sistema de transporte</p>

Vocabulary continued

insufficient

(adj.): not enough

insuficiente

(adjetivo): que no basta

investment

(noun): the money given to build or improve something

inversión

(sustantivo): el dinero que se entrega para construir o mejorar algo

main

(noun): large underground pipe in a water system

línea principal

(sustantivo): gran tubería subterránea en un sistema de agua

mandate

(noun): an official order; a requirement

mandato

(sustantivo): una orden oficial; un requerimiento

manipulators

(noun): ones who change things secretly to suit their own purposes

manipuladores

(sustantivo): personas que cambian las cosas en secreto para satisfacer sus propios fines

mitigated

(verb): made a situation less serious

mitigar

(verbo): hacer que una situación sea menos grave

***modernize**

(verb): update

***modernizar**

(verbo): actualizar

oxymoronic

(adj.): made up of a combination of words that have the opposite meanings

contradictorio

(adjetivo): compuesto por una combinación de palabras que tienen significados opuestos

paramount

(adj.): very important

supremo

(adjetivo): muy importante

pennywise, pound-foolish

(idiom): inexpensive right now, but not completely adequate, and so costly in the long run

lo barato sale caro

(expresión): barato en este momento, pero no de muy buena calidad y más costoso en el largo plazo

Vocabulary continued

<p>percolating (verb): slowly filtering through</p>	<p>filtrar (verbo): traspasar lentamente a través de algo</p>
<p>permeable (adj.): allowing water to pass through</p>	<p>permeable (adjetivo): que permite que el agua pase</p>
<p>porous (adj.): containing many small holes, like a sponge</p>	<p>poroso (adjetivo): que contiene muchos agujeros pequeños, como una esponja</p>
<p>ports (noun): harbors where ships can stop for loading and unloading</p>	<p>puertos (sustantivo): sitios donde los barcos pueden detenerse para cargar y descargar</p>
<p>proactive (adj.): responding to a potential problem before it becomes an actual problem</p>	<p>proactivo (adjetivo): que responde a un problema potencial antes de que se convierta en un problema real</p>
<p>purse strings (idiom): access to financial resources</p>	<p>lograr las conexiones (expresión): tener acceso a los recursos financieros</p>
<p>regard (noun): attention to; concern for</p>	<p>consideración (sustantivo): atención o preocupación hacia algo o alguien</p>
<p>resilience (noun): the ability to withstand stress</p>	<p>resiliencia (sustantivo): la capacidad de resistir estrés</p>
<p>revenue (noun): the money generated by the sale of a good or service; income</p>	<p>ingresos (sustantivo): el dinero generado por la venta de un bien o servicio; ganancias</p>
<p>share (noun): a portion</p>	<p>parte (sustantivo): una porción</p>
<p>shortfalls (noun): shortages</p>	<p>déficit (sustantivo): escasez</p>

Vocabulary continued

***subsidize**

(verb): pay money to assist an industry

***subvencionar**

(verbo): otorgar dinero con el fin de ayudar a una industria

truss

(noun): a strong beam that supports a bridge

entramado

(sustantivo): una viga fuerte que soporta un puente

underinvested

(verb): not providing enough funding

subinvertir

(verbo): no proporcionar suficientes fondos

wringing

(verb): squeezing and twisting

estrujar

(verbo): apretar y retorcer

“Our unwillingness to fix infrastructure will cost us dearly” and “US has underinvested in infrastructure for decades”

Which author most convincingly explains why America’s infrastructure has fallen into disrepair?

¿Qué autor explica más convincentemente por qué la infraestructura estadounidense ha caído en el deterioro?

Summary

English Both articles discuss problems that have arisen due to Amtrak’s lack of funding, but each offers a unique perspective about the impact of poorly funded infrastructure.

One point of view:

According to journalist Ann McFeatters, decided she needed to experience for herself a train ride from D.C. to New York. In the wake of a fatal train derailment that claimed 8 people’s lives and injured more than 180 people, she wanted to understand what the experience was like. What she found **appalled** her and was indicative of other major issues related to the United States’s **beleaguered** national **infrastructure**. McFeatters is angry, at Congress for **insufficiently** funding maintenance and **collective** indifference to the issue. She is also scared by the public’s lack of **regard** for infrastructure, as we all rely on it to keep the economy healthy. Citing numerous examples such as a failed bridge **truss** in Minneapolis and a lead paint issue in homeless shelters in D.C., it is clear we have many issues to address. How we go about loosening the **purse strings** to pay for it is less clear.

A second point of view:

In his article for The Philadelphia Inquirer, Robert Puentes reports that the United States has been underfunding **infrastructure** maintenance for decades. Compared to similarly developed peer nations like Canada and South Korea, the United States reinvests far less of its economic wealth in its infrastructure. For the **foreseeable** future this will be the case, as further budget cuts and **shortfalls** are predicted. In an effort to promote safety locally, some cities like Seattle are taking matters into their own hands and creating infrastructure programs. Regions that are affected by natural disasters have also begun demanding greater funds, as waterways and electric grids often were out for several days after storms. While many potential national solutions are **percolating**, nothing has been finalized. Puentes contends that for lasting change and complete **modernization** to come about, Congress needs to develop a long-term health plan and commit to fully funding it.

Summary continued

Español Ambos artículos discuten los problemas que han surgido debido a la falta de financiamiento de Amtrak, pero cada uno ofrece una perspectiva única sobre el impacto de la infraestructura mal financiada.

Un punto de vista:

La periodista Ann McFeatters decidió que tenía que experimentar por sí misma un viaje en tren desde D.C. hasta Nueva York. Tras un descarrilamiento de tren fatal que cobró la vida de 8 personas e hirió a 180 personas más, quería entender lo que fue la experiencia. Lo que encontró la **horrorizó** y era indicativo de otros aspectos importantes vinculados a la asediada **infraestructura** nacional de los Estados Unidos. McFeatters está enfadada con el Congreso por el financiamiento **insuficiente** al mantenimiento y la indiferencia **colectiva** al tema. Ella también tiene miedo por la falta de **consideración** por la infraestructura por parte de los usuarios, ya que dependemos de ella para mantener la economía sana. Citando numerosos ejemplos tales como un **entramado** de puente fallido en Minneapolis y un problema de la pintura con plomo en refugios para las personas sin hogar en D.C., es evidente que tenemos muchos asuntos que abordar. Cómo vamos a lograr las **conexiones** para pagar por ello está menos claro.

Un segundo punto de vista:

En su artículo para el periódico The Philadelphia Inquirer, Robert Puentes informa de que los Estados Unidos ha sufrido una falta de financiamiento en el mantenimiento de la **infraestructura** durante décadas. En comparación con las naciones desarrolladas similares como Canadá y Corea del Sur, Estados Unidos reinvierte mucho menos porcentaje de su riqueza económica en su infraestructura. En el futuro **previsible** este será el caso, a medida que haya más recortes presupuestarios y se espera mayor **déficit**. En un esfuerzo por promover la seguridad a nivel local, algunas ciudades como Seattle están tomando el asunto en sus propias manos y creando programas de infraestructura. Las regiones que se ven afectadas por los desastres naturales también han empezado a exigir mayores recursos, ya que el suministro de agua se detenía y las redes eléctricas a menudo estaban apagadas varios días después de las tormentas. Mientras que muchas soluciones potenciales nacionales están **filtrándose**, nada ha sido finalizado. Puentes sostiene que para lograr un cambio y que la **modernización** duradera tenga lugar, el Congreso tiene que desarrollar un plan de salud a largo plazo y comprometerse a financiarlo por completo.

LESSON “Our Unwillingness to Fix Infrastructure Will Cost Us Dearly” ...

CERCA QUESTION Which author most convincingly explains why U.S. infrastructure has fallen into disrepair?

4 Summarize

These two stories offer differing perspectives about

_____.

In the first article, the author argues that the reasons U.S.

infrastructure is crumbling are _____.

The second article the author concludes by stating that for U.S.

infrastructure to be repaired properly _____

and _____ must happen.

5 Build Your Argument

Claim _____ *most convincingly explains why the United States’s infrastructure has fallen into disrepair*

Reason *because* _____.

Evidence *One of the strongest examples used was*

_____.

Reasoning *which indicates that* _____.

Counterargument *While* _____

offers many reasons why U.S. infrastructure is crumbling,

_____ *is more ultimately more convincing.*

5 Build Your Argument

Claim _____ *most convincingly explains why the United States’s infrastructure has fallen into disrepair*

Reason *because* _____.

Evidence *One of the strongest examples used was*

_____.

Reasoning *which indicates that* _____.

Counterargument *While* _____

offers many reasons why U.S. infrastructure is crumbling,

_____ *is more ultimately more convincing.*

Evidence *Elsewhere in the article* _____ *notes that*

_____.

Reasoning *which is important because* _____.

6 Create Your CERCA

After weighing the two arguments regarding the issues with U.S.

infrastructure, it is fair to say that _____ *makes a*

more convincing argument because _____.