CITY CENTERS IN US HISTORY: AMERICAN ECONOMIC DEVELOPMENT

A Unit for High School Students in U.S. History and Economics Courses

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This unit was developed through a grant from the National Endowment for the Humanities to DePaul University, Chicago, for the project: Economic Frameworks for U.S. History.

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Acknowledgements

The project director and project economist take responsibility for the views of economics and of history presented in this unit and for the examples and explanations used to represent those views. The project has benefited greatly, however, from the contributions of many people.

Dr. Gerald Danzer, University of Illinois at Chicago, served as history consultant. Carole Krucoff, Chicago Historical Society, served as project evaluator. Dr. William H. McNeill, University of Chicago, assisted in the review and revision of the unit. Fifty teachers from Chicago area high schools assisted in the selection of topics, development, evaluation, and revision of the materials. Their students also contributed significantly to the improvement of the unit through recommendations for improving the clarity of the language and the relevance of topics.

Note to Teachers:

This unit brings a valuable approach to the study of U.S. history: it teaches important ideas and thinking skills students need to comprehend history and economics. The materials emphasize the city's role in that development and the decision-making processes that determine whether a change occurs. Through the unit, students will learn how to identify key elements and consequences of change. The unit deals with past, present, and future economic development, as students learn and apply key ideas to major changes in the United States and in their own neighborhood. Because of it deals with contemporary change as well as historic development, the unit can be used at any point in a history course or economics program.

The first pages are written directly for students to use as activity sheets or for you to use to organize class discussions. You may duplicate the sheets and use them individually or copy the entire 20-page set and distribute the material as a whole unit.

The unit also includes a special section of resources for teachers. Because the unit correlates closely with U.S. history texts, you will find that you already have many other related resources in your curriculum.

Contents of the Unit

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PARTICIPATING TEACHERS

The following teachers participated in the project “Economic Frameworks for U.S. History.: Their individual work on the project provided useful resources for this unit, and their assistance in the planning and development of these materials was especially valuable for its emphasis on making the unit practical and useful.

Charles Anderson, Niles West High School
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PREVIEW: CITY CENTERS

You already have a U.S. history textbook and it probably is at least 300 pages long, so why should you add these pages to your history course? Your textbook covers all of American history, so it includes the important cities. But it probably doesn't have enough pages to spend some time dealing with two very important questions that are the key ideas in this unit:

1. Why are cities important places?

2. How do people bring about changes in one city that affect people far beyond that city's limits?

Because you live in a metropolitan area, you are in a center of culture, economics, government, politics, and religion. If you read the phone directory, you would be bored, but you also would find thousands of agencies, businesses, and institutions that affect the lives of people well beyond your own neighborhood. Making a catalog of all those organizations is one way to look at a city, but that isn't history. To study history, you need to consider the people who put together those organizations in the first place—or took them apart and rebuilt them.

If you read a phone directory for your area 10 years ago, you would find some organizations that are not listed today. And some of today's listings wouldn't be there. A city is a changing place, and it is a place that can introduce changes that will be part of history books in the future. While you could trace changes and make predictions just using the telephone book, you won't have a framework for looking at those changes. This unit is a chance to look at your city in a new way. It will give you a framework you can use to discover patterns in history and in your city today.

YOUR CITY AND YOUR IDEAS

We were going to write a pre-test for this unit, but this is not a usual kind of unit and while it deals with important issues and questions, there really is no one correct answer for any of the questions. So we have put together a list of five important ideas and asked questions to help you apply the idea to your own city. Each question deals with a different important idea that is part of this project. Write your answers to the questions now and then review them after you finish the unit.

1. Idea: The city is a center

Questions:
A. In what way is your city a center for its area?

B. What factors make your city so important?

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PREVIEW (continued)

2. Idea: Economic development (a change in the structure of the economy) requires three factors—(1) persons who respond to changing conditions with a plan for change; (2) funding of the change; (3) support for the change that enables its developers to overcome resistance.

Questions:
A. What are the kinds of characteristics a person needs to keep on working to bring about a change in the economy?

B. What questions might a banker in your city ask a person who asks for a loan to pay for a new project? What rules might the city government set for using public funds for that project?

C. Give an example of an economic development project that someone is proposing in your city now. It could be a World's Fair or a new airport. Who might support this change and who might oppose it?

3. Idea: Progress is not automatic or continual; some cities have been very important at times and then have lost some importance.

Question:
After the Revolutionary War, Alexander Hamilton predicted that Jersey City would become "the metropolis of the world." It hasn't done so yet. Why might a city be more important at one time than at another time?

4. Idea: Change is not progress for everyone; economic development destroys some things as it creates other.

Question:
One example of this "creative destruction" is the unemployment of buggy makers when people started to buy automobiles. Give two examples of creative destruction going on today.

5. Idea: Change is not automatic; the building of cities and the development of economies depends upon the choices and actions of people.

Question:
In 600 B.C., a Greek wrote about the important cities there that "Not houses finely roofed nor the stones of walls well built…nor dockyards make the city, but men able to use their opportunity." [Alcaeus quoted by Jane Jacobs in *The Economy of Cities*.] What do you think are the keys to the development of a city?

6. Your Ideas: What other ideas are important to understanding a city and why?

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KEYS TO HISTORY

These economic terms are keys to understanding changes. They follow a kind of time line to show how you might apply them, but they do not belong to just one time period. Each idea is part of the economy and the way it changes throughout history and today. As you examine each one, think of at least one other example from another time in history—or today—that shows what that idea means.

1500s

CITY

You won't find the city in many economic glossaries, but it has always been an important economic center as well as a cultural and political center. The major changes of the 1500s—and of preceding centuries—were based in cities. In the 1500s, European cities were changing as trade and war brought cultures into contact. As they built empires, those cities would affect regions much larger than their own countries.

COMPETITION

England, Holland, France, and Spain wanted new lands in the Americas. They competed for control there and for influence in Europe. European cities were centers of economic power competing against each other; Venice opposing Florence; Amsterdam opposing London.

1600s

CAPITAL

You can see one kind of capital: the tools, equipment, and buildings used to produce things people want. The colonies in North America brought most of their capital with them until people in the colonies set up their own workshops to make the tools and equipment they needed to build, farm, and travel.

HUMAN CAPITAL

You cannot see this kind of capital, but you can see its results. It is the productive knowledge and skills of people. Tools and buildings do not materialize or work by themselves. They require human capital. For example, the skills that blacksmiths brought to the colonies meant that people could get new tools, stoves, and many other things they needed. What are some kinds of human capital that immigrants have brought to North America since 1600? In each century, different kinds of skills are important for workers. What kinds of human capital might be most useful for workers today?

LAND

Land means natural resources, and North America held minerals (especially gold and silver), trees, furs, and other resources that Europeans wanted. One Native American said to an English trader that he must have come to America because he had run out of wood in Europe. The European laughed, but in a way it was true.

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1700s

INFRASTRUCTURE

The roadways, waterways, communication systems, water supplies, and other capital that people need to live and work. Infrastructure is a kind of physical capital. There has been some infrastructure in North America from the time the first building was built or path was cut. What would have been an important kind of infrastructure in your part of North America in the 1700s?

ECONOMIC DEVELOPMENT

Change in the way the economy is organized—its structure. In the 1700s, Americans set up shops, stores, factories, and mills. While most Americans worked on the land, many began to live and work in cities.

1800s

INVESTMENT

The process of making (or buying) new capital—equipment, supplies, tools, buildings, and other things a business needs to produce. In the 1800s, the United States began its own industry as manufacturers produced tools, iron products, and furniture instead of importing it from Europe.

ENTREPENEUR

Someone who brings about a change in the structure of the economy. Entrepreneurs are organizers who coordinate productive resources in a new way. They usually are business people, but they may be public officials or communal innovators who change the economy for social and political reasons. 1800s entrepreneurs include: Samuel Colt (introduced the interchangeable part), Samuel Gompers (founded the American Federation of Labor), and Jane Addams (founded the first U.S. settlement house.)

RESISTANCE

People oppose some changes, especially if the changes threaten the way they are used to living and working. In the 1800s, wagon makers fought against the building of canals. Then the canal owners fought against the building of the railroads.

INNOVATION

A change. Often, economic innovations come in clusters—they have connections. The building of the railroads and the growth of the steel industry were two innovations during this time that were connected with each other.

1900s

TECHNOLOGY

Know-how—the techniques for making products. In the 1900s, there were major changes in the kinds of production, including the introduction of the recent innovation of robotics. What other technological changes have affected production in each century—through today?

ECONOMY

The system of institutions that answer the four basic questions: What are we going to produce? How will we produce? How much will we produce? How will we distribute the products? You'll find many answers in U.S. history and in the U.S. today.

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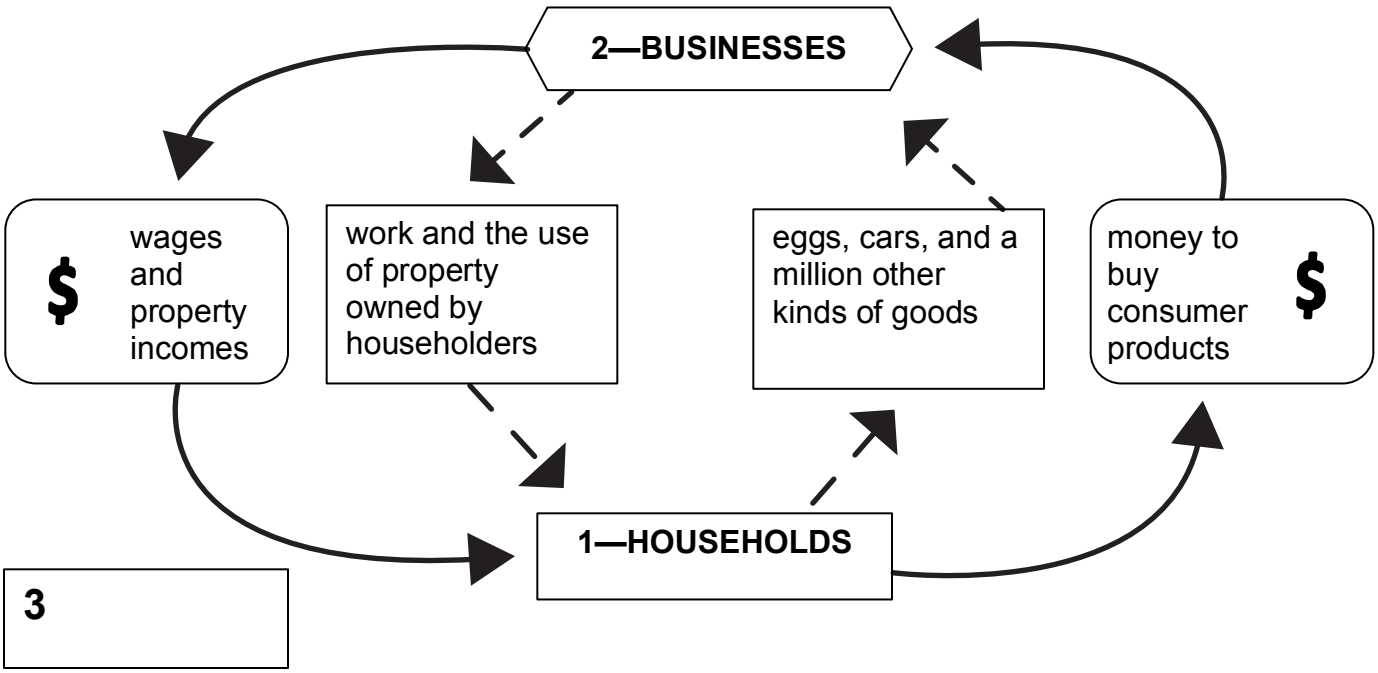
WHAT IS INVISIBLE AND EVERYWHERE?



What is invisible and everywhere? The economy. It is part of every building, street, and streetlight. And it is part of every decision a government makes, including how to pay for those streetlights, government workers, and (when they happen) for wars. You can't see the economic parts of those things, but the economy is an important part of them—and much more.

Economists show the economy by using models. Here is a diagram that shows a very basic model for the economy.

HOW THE MODEL WORKS

Households have two things businesses need: workers and resources (such as land someone owns). Households get money from businesses as wages and as incomes for property, such as rents. Households do two things with their money: they save some; they spend the rest to buy products from businesses.

There are two kinds of flows in this model: a flow of money, shown with solid lines, and a flow of real things shown with broken lines.

MAKE CONNECTIONS

If businesses want to expand, they borrow money from banks and other financial institutions. Put banks in box 3. Then draw arrows to show money going into banks from savings and into business through the banks as loans. Label your arrows.

Here's a problem: economies don't always grow. What might stop them?

BUILD A BIGGER MODEL

Models usually leave some things out as they try to make ideas clear. On another page, you could make a more complete model, showing business purchases from other businesses and a very big missing part: government. But the important idea here is that there are connections among all the parts of the economy. A change in one part affects all the others. So be sure your model keeps that idea clear.

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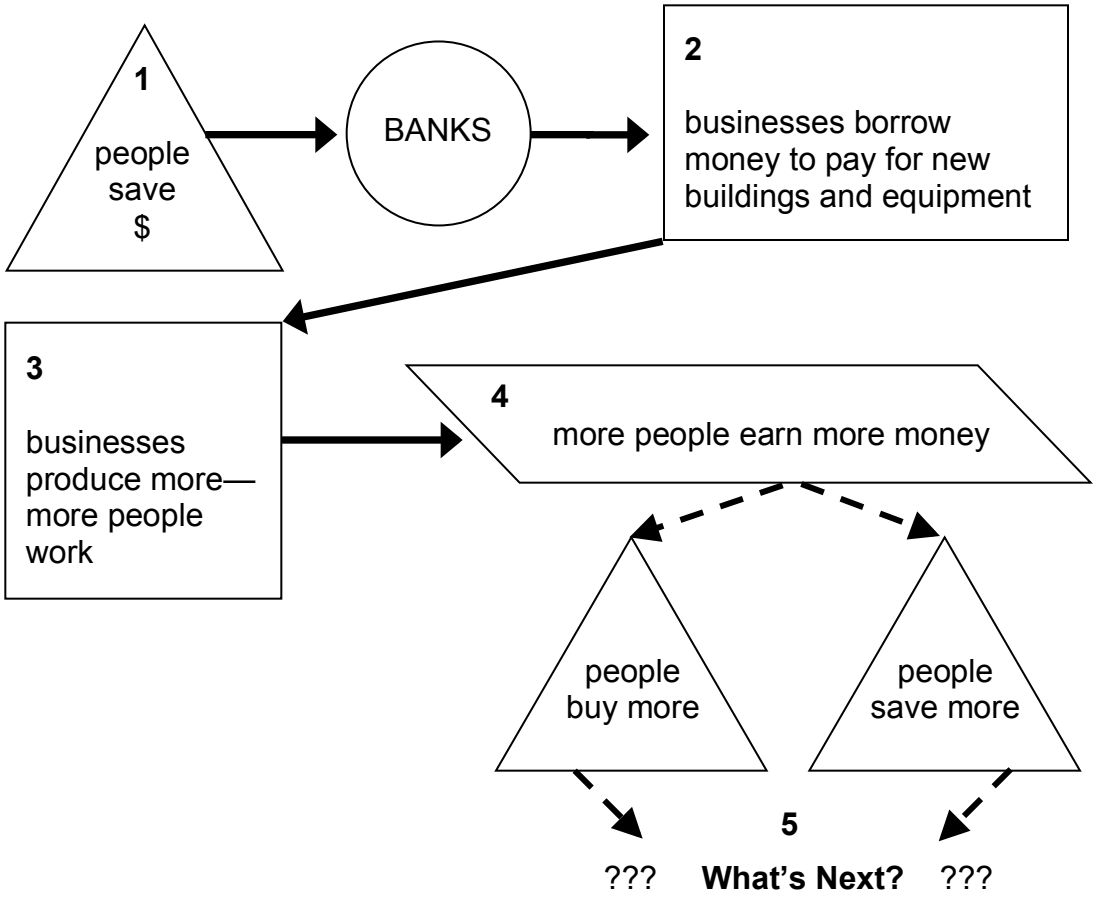
CHANGE: ONE VIEW

An economy doesn't stay the same. It changes all the time. An economy may shrink at times, such as major depression. At other times, it may grow.

Here is a flow chart showing how an economy might change.



What do you think the consequence would be?

Something important is missing from this chart: reasons.

At each step, people make choices. But there is no one reason for those choices. The economist Adam Smith said that people act from self-interest. That means that they make choices that will benefit them. He also said, though, that an "invisible hand" leads people to make choices that not only help them but help the economy to grow. Adam Smith wrote about economics in 1776, and this chart is based on his ideas, which have influenced people greatly since he wrote about them.

What is your view of these ideas? Before you decide, figure out what kinds of reasons you think that people in businesses, banks, and households would have for the choices at steps 1-5. Would they make those choices automatically? What other choices might they make?

Make your own model. Start over at step 1. This time, change what happens. People don't save. Or people save, but businesses don't want to expand. Show what changes take place when people make different choices.

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CITY CENTERS AND ECONOMIC DEVELOPMENT

Here is a way to look at economic development past, present and future. It is a model of how the economy changes. This model combines the ideas of Joseph Schumpeter, an economist who did not agree with Adam Smith, and the ideas of business historian, N.S.B. Gras.

Is this model better than Adam Smith's idea? Of course, we think so, but the answer to that question is up to you. See if this model works before you decide. To show how it works, we have set up several examples on the following pages. They are studies of development beginning early in American history and ending with today.

This model is new—it is an innovation. So some people (maybe including you) will resist it. Others (we hope including you) will find it useful.

To introduce our model, here are some of its important ideas and questions about them.

1. Idea: Cities are centers of the economy.

The headquarters of major firms usually locate in cities, as do major banks and other funding sources. So successful changes—innovations—usually take place in cities.

For example, Cyrus McCormick may have had the idea of introducing the reaper to farms while visiting a small farming community. But he went to the city of Chicago to get the funding, the workers, and the factory equipment to manufacture those machines.

Question: Name one change that took place in your city or another American city and figure out why it was based in that city and not in a small town.

2. Idea: An innovation is a new way to do things.

Here are five different kinds of innovation—changes in production.

a new product a new way to produce a new market

a new source of supply a new way to organize a business or public project

All of those are kinds of changes—kinds of innovation. So an innovation is an idea that is introduced into the economy. It is an idea that becomes real.

Question: Choose one innovation that you think is important today. It could be the computer, the shopping center, or anything else that has brought major change. Which of the five innovations is it?

There is much more to the model, and you'll find out how it works as you look at American economic development in the following case studies. Each one shows how we built the model—and how you can apply it.

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THE CITY CENTER: BOSTON

Just being in a good location for shipping doesn't mean that a city will become a seaport or a major economic center. For example, Los Angeles is a major shipping center on the West Coast even though its harbor was not ideal. One economist wrote:

> Many cities engaging in enormous trade occupy notable inferior trading sites. Tokyo and Los Angeles are examples. A senator from Maine—a state with many fine harbors but no consequential cities—once told the people of Los Angeles, 'You have made a big mistake in the location of your city.' He was annoyed because Los Angeles, in the 1920s, was lobbying for Federal funds to build itself a port. 'You should have put it at some point where a harbor already exists,' he scolded, 'instead of calling on the U.S. government to give you something which nature has refused.' [Jane Jacobs, The Economy of Cities.]

Boston was located in a good natural harbor. It developed into the economic center of New England, but not just because of that harbor. The chart below lists some of the important factors in Boston's development. They are factors of production: the parts of an economic activity—of making things people need.

Factors of Boston Production, 1620-1750

• Natural harbor • Farm tools • Grazing land • Brick kilns • Organizers of the fishing industry • Skilled craftsmen • Tools and machines that saved labor	• Great supply of cod nearby • Iron-making equipment • Indentured servants • Sawmills • English government workers	• Settlers who changed English tools to meet the special needs of the area • Rivers • Shipbuilders • Landowners • Fur-bearing animals • Iron forges

1. Boston became a major seaport and a shipbuilding center. Which factors probably were most important in that work?

2. Through the investments of London and Bristol firms called joint stock companies (especially the Massachusetts Bay Company), Boston became the economic capital of its region. What kinds of development probably took place as Boston gained importance?

3. Why might those British companies have decided to invest in Boston and not in another place, such as Newark or New York?

4. Make a chart like this one for your own city at a key time in its development. You could profile it at a time in the past or today.

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CITY CONNECTIONS: RIVER TRANSPORTATION

Transportation is a key part of economic development. Rivers are a major resource for development because they bring fresh water and cheap transportation links to an area. In the 1800s, America introduced two important innovations that improved water transportation: the building of new kinds of boats and the building of canals.

When Robert Fulton introduced his steamboat in 1807, it was not the first steamboat. But it was the first to become successful. People had resisted the change. And many people still felt in 1807 that the boat would bring problems—"fishermen became terrified…and they saw nothing but destruction devastating their fishing grounds…"

Here is a framework for looking at economic change based on our model. Use your knowledge of history, the statement above, and your imagination to answer the question in the framework.

FRAMEWORK FOR INNOVATION	APPLICATION
1. An entrepreneur responds to a change in conditions with an idea for another change.	What probably gave Fulton his idea?
2. Some people support the idea. It takes money to support an innovation.	What kinds of people might have welcomed the steamboat and why? Why might bankers or government have provided funding?
3. Some people resist the idea.	What kinds of people might have fought this change and why?
4. Some ideas fail because of opposition.	Earlier attempts to introduce the steamboat failed. What kinds of opposition could have stopped Fulton?
5. Some ideas succeed despite opposition.	Fulton succeeded. Why might his innovation have been successful while others with the same idea had failed?
6. Each idea leads to other changes. Some changes are other innovations, called "secondary innovations." Some changes affect workers, consumers, and other businesses.	On the back of this page, make a list or diagram showing what changes the steamboat might have led to. (Be sure to include people whose jobs it would hurt.)

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CITY CONNECTIONS: RAILROADS TO CHICAGO

Innovations don't just happen. People bring them about. Those people are entrepreneurs. In 1830, there were 23 miles of railroad tracks in the Unites States. By 1860, there were 30,626 miles of railroads. This chart shows the steps that an entrepreneur takes to try to bring about innovation and tells how one entrepreneur organized a railroad. (Some innovations fail, so some entrepreneurs don't get to all these steps. After you read the chart, ask an example of a success or failure—such as introduction of an activity at your school. Choose one that failed or one that succeeded.)

STEPS TO INNOVATION	OUR EXAMPLE	YOUR EXAMPLE
1. The Idea A person has a plan, a vision to change the economy.	William Ogden thought that a railroad would bring business to Chicago.	
2. Getting Funding That person, an entrepreneur, gets financial support bringing about the innovation.	In 1836, William Ogden tried to get funds to pay for the building of Chicago's first railroad, but funds were scarce. He stopped his effort for several years, but in 1846 he had enough funds from investors in Chicago, New York banks, and Midwestern farmers.	
3. Entrepreneurship The project has to be organized.	Ogden and his partners set up a company to build the Galena and Chicago Union Railroad, paid for the equipment and supplies and the labor, and got the land for the railroad route.	
4. Resistance Because innovations introduce new products or ways of producing, they displace some members of the economy. These people usually resist the innovation. The change brings creation and destructions—creative destruction.	Wagon makers, canal workers, owners of wagon-hauling services, and others who would lose some business to the railroads opposed the building of the railroads. The railroad created new jobs, but it destroyed some old jobs. So it brought creative destruction.	
5. Political Response Government can support innovation by providing funds, services, special laws; it also can slow or stop change.	William Ogden was the mayor of Chicago, so he had some political support, but he also had some opposition.	

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FARMING PROGRESS IN A CITY: McCORMICK'S REAPER

When people speak of economic development, often they mean the growth of manufacturing industries. That meaning is too limited, though. Now, for example, a main area of U.S. economic development is in the service industries. From colonial times through 1879, the development of the agricultural industry was of greater importance than the growth of factories that become so important in the 1870s. No city is self-sufficient. Every city depends on smaller agricultural communities for survival.

At first, the United States was a country primarily of farmers. And even as the cities grew, the farm communities grew, too. The farmer supplied food the city needed, cotton for the textile mills, and other raw materials for other city-based industries. As cities grew, their growing populations and industries needed more and more farm products. One way to meet this need would have been to get more farmers. But there is another solution, too. With improved capital—better equipment—each farmer worker could produce more. Cyrus McCormick introduced better farm equipment and changed the agriculture industry and the economy of the city of Chicago.

As you review the history of this one innovation, think of two other examples of inventions: the computer (which has changed the way people in many industries work) and chicken goggles (an invention to stop chickens from pecking each other's eyes, a product that has not been widely accepted in agriculture since its invention in 1903—"Farmers by the millions ignored them." [Small Inventions, National Geographic, 1984.])

When Cyrus McCormick showed his reaper to people, many though it was a joke. The London Times called it "a cross between an Astley chariot, a wheelbarrow, and a flying machine." And in the mid-1800s, you can imagine how believable a flying machine was.

Yet by 1859, McCormick's firm had sold more than 50,000 reapers. Why did Cyrus McCormick's invention succeed? Look for answers as you read ideas related to the history of this project.

Idea 1: To succeed, an invention must work. That may sound very simple, but it is an idea that not every inventor has recognized.

Here are some reports Cyrus McCormick wrote about his project.

> From the experiment in 1831 until the harvest of 1840, I did not sell a single reaper, except one, which I afterwards took back… Experience proved to me that it was best for the public, as well as myself, that no sales were made, as defects presented themselves which would have made the reaper unprofitable in other hands… I was not sufficiently satisfied of its being a 'useful' machine, to patent the reaper, until the year 1834, its construction and proportions having been imperfect, requiring much effort to make them, while light, yet simple, strong, and durable.

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McCORMICK'S REAPER (continued)

Idea 2: An invention does not introduce itself; the entrepreneur must find ways to introduce it effectively.

Cyrus McCormick originated these new ways of selling:

- He gave a written guarantee with every machine
- He specified the price of the equipment although at the time the practice was to set the price given the bargaining conditions at the moment.

Idea 3: Inventions that save labor are valuable to producers, especially in times of scarce labor or high labor costs.

McCormick wrote that "…a great many farmers have certified that it will pay for itself in a single harvest, and I have no doubt that such is the fact estimating its saving of grain as well as labor." One report in 1859 said that the 50,000 reapers in use by then were "doing the work of 350,000 men, saving $4,000,000 in wages…"

Idea 4: An innovation that is introduced in one city can affect people in places far beyond that city's limits—as well as the city's economy.

McCormick chose to come to Chicago instead of Cincinnati, St. Louis, Cleveland, or Milwaukee. All of those other cities were located in the grain-growing region that would hold most of his customers. Chicago already was a center for grain shipments, and putting the factory there added to Chicago's agricultural importance. McCormick's factory brought jobs directly and indirectly, as Chicago dock workers and railroad workers loaded more and more reapers for shipment to farms. Those reapers would change the farm industry throughout the Midwest and beyond.

Questions:

1. How and why did McCormick improve the reaper before he sold it?
2. If you were a farmer, why might you want to buy a McCormick reaper?
3. If you were a farm worker, how might you have viewed the reaper?
4. Why did McCormick's reaper succeed?
5. One historian wrote that "the United States owes much more to the reaper than it owes to the factory or the railroad or the Wall Street Stock Exchange. Without the magical grain machinery that gives us cheap bread, the whole new structure of our civilization, with all its dazzling luxuries and refinements, would be withered by the blight of Famine." [Herbert N. Casson, The Romance of the Reaper, 1908.]

    A. Why might that historian have thought that the reaper was so important?
    B. What other inventions have had such great impact on the economy? Consider the computer, the telephone, and others.

6. Remember the chicken goggles. Not every invention succeeds. How could the chicken goggle manufacturer have made them a success—or was that development impossible?

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SOCIAL CHANGE: HULL HOUSE

An economy makes progress when people have a better standard of living—more of the things they need to live. Many innovations such as the building of the railroads benefited many Americans. Still, at every time in American history, some Americans have been left out of the general progress or even have been hurt by it. Throughout that history, though, some Americans have worked to bring about reforms, to introduce social changes that would give more people a greater share in the economy. These reformers have not worked for profit themselves. What are the reasons for their innovations? Read about conditions one reformer reacted to, and then decide how she might have brought about an innovation in society.

Jane Addams was reformer who worked in Chicago and who had an impact beyond the city. In 1915, she founded the Women's International League for Peace and Freedom. In 1931, she became the first woman to receive the Nobel Peace Prize. But it is her work in Chicago that we will look at here, work that began in the late 1800s.

In 1889, Jane Addams wrote about a poor neighborhood in Chicago:

> Hull House once stood in the suburbs, but the city has steadily grown around it and its site now has corners on three or four foreign colonies. Between Halsted Street and the river live about ten thousand Italians…to the south on Twelve Street are many Germans, and side streets are given over almost entirely to Polish and Russian Jews. Still farther south, these Jewish colonies merge into a huge Bohemian colony, so vast that Chicago ranks as the third Bohemian city in the world. To the northeast are many Canadian-French, clannish in spite of their long residence in America, and to the north are Irish and first generation Americans. On the streets directly west and farther north are well-to-do English speaking families, many of whom own their houses and have lived in the neighborhood for years; one man is still living in his old farmhouse…
>
> …The streets are inexpressibly dirty, the number of schools inadequate, sanitary legislation unenforced, the street lighting bad, the paving miserable and altogether lacking in the alleys and smaller streets, and the stables foul beyond description. Hundreds of houses are connected with the street sewer…The older and richer inhabitants seem anxious to move away…They make room for newly arrived immigrants who are densely ignorant of civic duties…An unscrupulous contractor regards no basement as too dark, no table loft too foul, no rear shanty too provisional, to tenement room too small for his workroom, as these conditions imply low rental.

To understand Jane Addams' work, it is important to understand the problems she faced trying to bring about change in this neighborhood.

1. What kinds of problems would immigrants to Chicago have faced in 1900?

2. The people who lived in the Hull House neighborhood were not alike. What kinds of difficulties would those social differences have caused Jane Addams as she tried to organize a program to improve the neighborhood?

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SOCIAL CHANGE (continued)

Jane Addams set up a program of education, health support, and day care at a building in Chicago called Hull House. She also spent a lot of time at City Hall demanding improvements in poor neighborhoods. Here are some of the changes she brought about:

--She maintained three baths in the basement of the Hull House during the first two summers, and based on the need she demonstrated for those baths, the city built the first public bathhouse in Chicago.

--She and Ellen Gates Starr transformed Hull House from a family home into the first settlement house in the United States, a complex of thirteen buildings, housing a kindergarten, gymnasium, theater, art museum, boys club, and rooms for classes, lectures and social and political meetings.

Questions to Discuss:

A. What skills would Jane Addams have needed to succeed?

B. What reasons might have motivated her to work for these social changes?

C. What resistance did she probably encounter?

D. Look at the list of accomplishments. Some, such as the kindergarten, clearly meet a community need. The kindergarten gave supervision and education that young children need. But other projects, such as the theater and art museum, might not be on the priority list for some social reformers. And three bathtubs might seem like a very small change. What do Jane Addam's projects show about what was important to her?

E. What impact do you think her accomplishments had on the community?

F. Some people at City Hall may have welcomed Jane Addams, but others may have said "here comes that woman again." Not everyone welcomes a social reformer, and such a person may be difficult to deal with. What social reformers are at work in your community now, and how do people in government, business, labor, and the community in general perceive them?

Now, consider your own community.

1. What economic problems exist? Write a description of them similar to Jane Addams' profile of Chicago slums in 1889. Be sure to include social problems such as gangs, drugs, and crime. Those social problems have economic impact. Discuss that impact as you describe the problems.

2. What kinds of innovations would improve the community in terms of those problems?

3. What kinds of difficulties would someone face trying to bring about those innovations?

4. How—and why—might a member of your community bring about improvements despite resistance?

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LABOR CHANGE: THE HAYMARKET CONFRONTATION

Haymarket is a place in Chicago that stands for an important struggle: the fight by workers for better working conditions. In 1886, striking workers and police battled at Haymarket Square. The fighting at Haymarket was part of a struggle to get an 8-hour working day. And that change was one of many changes that labor unions have tried to bring about.

This time line traces some of the events in the Haymarket history.

1884 The American Federation of Labor, headed by Samuel Gompers, meets in Chicago and declares that May 1, 1886, will be the day for workers all over America to demand the 8-hour workday.

1885 In July, there is a Street Car Strike in Chicago. Workers are clubbed and killed by the police and Pinkerton detectives.

1886 On May 1st, Albert and Lucy Parsons and their two children lead 80,000 workers up Michigan Avenue in Chicago to support the 8-hour day movement. Some 30,000 of those workers were on strike in Chicago at that time.

May 3rd: August Spies speaks to striking lumber workers and sees police attack workers at nearby McCormick Reaper plant. Some workers are killed. Spies suggests a mass meeting to protest police brutality to be held at Haymarket Square the next evening. The Knights of Labor—a radical union that seeks to get the workers control of the businesses they work for—is involved in organizing the meeting.

May 4th: The Haymarket Protest Meeting—at 8:30 pm, August Spies opens the meeting of 2,500 people. Albert Parsons speaks to the group. By 10:25 pm, with only 200 people left, the meeting is ending when 176 police attack the audience and someone throws a bomb. Seven policemen and four workmen die, and 70 policemen are wounded.

May 5th: Police do not find the bomb-thrower—they never do. They arrest eight union leaders, including Albert Parsons, close all union newspapers, and declare martial law in Chicago.

June 21: The Haymarket trial begins; on August 20th, the jury brings in guilty verdicts with the death penalty by hanging for 7 of the 8 defendants; the 8th gets a sentence of 15 years of hard labor.

November 10th: Two of the men have sentences commuted to life in prison. Another is found in his prison cell with his hand half blown off, and he dies that day. On November 11th, Parson, Spies, and two other labor leaders are hanged at noon.

1887 Workers leave the Knights of Labor to join the A F of L instead because it works for change more peacefully than the Knights do.

1889 The Chicago Times newspaper exposes police corruption in the city, and police inspector Bonfield, who led the attack on Haymarket, is removed from the police force.

1893 The Governor of Illinois pardons the three remaining Haymarket defendants.

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Points of View

What did the Haymarket Riot accomplish? What did the trial accomplish? At the time, your answer depended on your point of view. It still does. Here are statements by people concerned with the Haymarket trial.

--At his trial, Albert Parsons reported of his speech at Haymarket: "I spoke of the compulsory idleness and starvation wages, and how these things drove the working men to desperation…under this system the workingmen of the United States were really doing ten hours' work for two hours' pay."

--The State's Attorney at the trial said that "Law is on trial. Anarchy is on trial…Convict these men, make examples of them, hang them and you save our institutions, our society."

--August Spies told the judge at the trial: "You may pronounce the sentence upon me, honorable judge, but let the world know that in A.D. 1886 in the State of Illinois, eight men were sentenced to death because they believed in a better future…"

--A Chicago business man commented after the trial, "No, I don't consider these people to have been found guilty of any offense, but they must be hanged…The labor movement must be crushed. The Knights of Labor will not dare to create discontent again if these men are hanged."

Did the Haymarket Riot accomplish any union goals? The Knights of Labor believed that the worker should take control of the key industries. This event did not help to accomplish that goal. Because it increased fear of unions to some people, it hurt some unions. In a way, it also helped them. Some workers left the Knights of Labor and chose instead to join Samuel Gompers' union. And the Haymarket event focused attention on labor.

Samuel Gompers was an innovator in that he introduced a new idea in response to changing conditions. Parsons and Spies supported radical ideas that other leaders had proposed, so while they are heroes of the labor movement, they were not innovators. Samuel Gompers' new idea was that the worker should have a share of the profits, not control of the industries. In time, the A F of L would become the largest group of labor unions in the United States, realizing Samuel Gompers' vision of a new kind of union.

Questions to discuss:

1. Unions got the 8-hour working day. How else are working conditions now different from the conditions that Parsons and others protested in the 1880s?

2. Every change has good and bad sides. There are many different views of the changes labor unions have brought. What are some of the good and some of the bad aspects of unions?

3. Collect news about labor issues from the newspaper. Then identify the different points of view on those current issues. What is your view?

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CONSEQUENCES OF CHANGE: THE AUTO AND THE AIRPLANE

Imagine a world without airplanes and automobiles and you can see some of the changes each innovation brought. The automobile and the airplane changed much more than the way people can travel. They changed they way many people live. For example, with the automobile came the growth of the suburbs and many other changes.

Each major innovation leads to many other innovations, called secondary innovations. It also brings creative destruction—people lose jobs and businesses close when a change in production makes them no longer necessary. On the chart below, list innovations that came from one major innovation: the automobile. Also indentify the people who benefited and the people who were hurt in some way by change. One resource you can use to indentify related innovations is the telephone directory. Use it to locate businesses that are related directly and indirectly to the automobile. You will have to use your imagination and history books to indentify the people whose jobs or ways of living the automobile hurt.

Then profile the airplane on another chart.

IMPACT OF INNOVATION—THE AUTOMOBILE

RELATED INNOVATIONS	WHO BENEFITS	WHO LOSES

After you complete your chart for the airplane, decide: Which of the two innovations has had the most impact on the United States?

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ECONOMIC DEVELOPMENT: ONE CITY NEIGHBORHOOD

In this unit so far, we have looked at the city as a center for economic development. In this last case, we will look within the city to explore the development of one neighborhood. It is an imaginary neighborhood, but you could make it a real place by substituting facts about your community.

Profile of The Neighborhood

Housing Patterns:

--Old buildings have been remodeled.
--Many single-family homes have been converted into apartments.
--On a few blocks, houses have become too expensive to maintain, and they are being demolished and replaced with apartment buildings.

Population:

--Hispanics and African Americans have lived in the neighborhood for two to three generations, as have many whites. But many of the earlier white families sold their homes and have moved to suburbs. The new white residents in the neighborhood tend to be professionals moving close to offices downtown.

Infrastructure:

--The city has installed new lighting and is repaving the streets.
--Parking is a problem on many blocks, as people who used to be able to park in front of their houses have to park a few blocks away now.

Social Problems:

--Gangs from the neighborhood confront residents, especially newer residents, in incidents ranging from intimidation to robbery.
--Many people on fixed incomes have found that the property tax bills in the area are much higher than they can afford.

There are many points of view on economic development, and you will find them in a neighborhood as well as in a nation. The Community Council asks community members to present their priorities for the neighborhood's future development at a meeting. Indentify what you think is a representative of each of the following groups might argue for at that meeting:

The gangs	people on fixed incomes	renters
Families	planning to move to the suburbs	new residents with city jobs
Grocery store owners	boutique managers	_____ (another group)

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ONE CITY NEIGHBORHOOD (continued)

Four hundred years ago, people who lived in Boston took part in a project that continues today: the development of the city's economy. In this unit, we have focused on people who brought about major changes, but the history of American economic development really includes every person who supported or resisted changes in the economy. And the story of the economic development of Boston includes the creation of the new waterfront center as well as the improvement of housing and transportation in Roxbury.

In this unit, you have used the framework to look at history. Now you will use it to plan the future. Often the focus of attention in development is on changes in the downtown section of a city. And those changes are important to the vitality of a city's economy. But so are changes in a city's neighborhoods. In this section, you will use the unit's framework to plan economic development for your own neighborhood. You will plan a public innovation—one sponsored by the government. For this project, you are in charge of the city's Department of Economic Development.

Step 1: The innovator responds to change.

--What economic changes are taking place in your neighborhood?
--Choose one change that you think is very important to the development of your neighborhood.

Step 2: The innovator adapts an idea or develops a new idea that will introduce: a new product, a new way of producing, a new kind of business organization, a new market, or a new source of supply.

--What is the idea you would introduce to your neighborhood's economy?

Step 3: The innovator tries to get support from funding sources.

--You are in charge of Economic Development, but you still have to get City Council to approve the funds for your program. How will you persuade them to fund it?

Step 4: The innovator meets resistance.

--Who probably would resist your program?
--What response will you make to that resistance?

Step 5: If the innovation takes place, there is creative destruction.

--What will your innovation create and what will it destroy?

Step 6: One change leads to another.

--What will be the next changes—and your responses?

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FRAMEWORK FOR DEVELOPING A CASE STUDY

In this unit, we have used several examples to show how people brought about changes and how those changes affected people. Now use what you have learned to build your own case study. Use this outline to complete the unit with your case study. You can deal with the distant past or the recent past. Start by looking for changes that took place in your own metropolitan area. You could profile a change from the point of view of its impact on your own neighborhood today or at some time in the past.

Here are the steps to follow:

1. Choose a change that you think is important. It could be the introduction of an invention, such as the cotton gin, or the introduction of an idea, such as interchangeable parts. The only limit on the kind of change you choose is that a city played an important role in its development. That is not much of a limit, you'll find.

2. Use this list to collect information about this change. (It is the same list we used to organize the case studies in this unit, so it stresses the same ideas.) Be sure to use primary sources if possible—the statements of people who took part in the change. If it is a recent change, you can interview people who were involved in this change—and whom it affects today.

   a. Who brought about this change? (Who was the entrepreneur or innovator?)

   b. Why did this person want to make this change?

   c. What city was most important in the development of this change?

   d. How did the innovator get funds to support the change?

   e. What groups or kinds of individuals resisted the change—and why?

   f. What groups or kinds of individuals supported or helped to bring about the change—and why?

   g. What did this change create—what did it bring into the economy? (Consider kinds of jobs, products, and ways of working and living. Look beyond the first change for secondary changes. Just as the automobile led to many changes in the ways people live, every change leads to other changes as people respond to it.)

   h. What did this change destroy? (Consider the same kinds of things listed for question g—jobs, products, ways of working and living. And look for secondary destruction, too.)

3. Then organize your study.

4. Write a conclusion. Explain your views on: the importance of this change for your own area's economic development; what lessons for economic development plans this study suggests.

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RESOURCES FOR TEACHERS

This section includes the following resources for teaching the unit City Centers in U.S. History:

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PROJECT BIBLIOGRAPHY

During the work on this project, many economics and history books were vital sources of ideas and information. You will find that you can increase the relevance of this material to your own metropolitan area by using historic and current profiles of your city and its economic activities. In addition to such local resources, the following books represent important resources you can use to build on this unit. Brief teaching suggestions annotate this listing.

Economics and Economic History

Jack Blicksilver, ed., Views on U.S. Economic and Business History (Atlanta, GA: Georgia State University, 1985).
--Provides useful information on specific innovations and economic situations that students can use to develop case studies and to see that different people have different points of view on economic growth.

Robert L Heilbroner, The Economic Transformation of America (New York: Harcourt Brace Jovanovich, Inc., 1977).
--A valuable complement to your U.S. history text, which you can use to introduce economic themes throughout your course.

Jonathan Hughes, American Economic History (Glenview, IL: Scott, Foresman and Company, 1983).
--A comprehensive and thorough analysis you can use to develop your background in the subject.

Jane Jacobs, Cities and the Wealth of Nations (New York: Random House, 1984).
--A book that you can use to demonstrate the significance of cities in economic development in the U.S. and the world.

Otto Mayr and Robert C. Prost, eds., Yankee Enterprise (Washington, D.C.: Smithsonian Institution Press, 1981).
--A book you can students can use to develop case studies of innovation.

Ross M. Robertson and Gary M. Walton, History of the American Economy (New York: Harcourt Brace Jovanovich, Inc., 1979).
--This book will be a useful reference work as you deal with economic development throughout U.S. history.

Joseph A. Schumpeter, The Theory of Economic Development (London: Oxford University Press, 1961 [paperback]).
--Many of the key elements in this unit's model are presented in this work, which will be an important resource for your understanding of this model.

This unit was developed through a grant from the National Endowment for the Humanities to DePaul University.

Geography

Donald W. Meinig, The Shaping of America (New Haven: Yale University Press, 1986).
--Maps and the geography they represent are a valuable way to teach the ideas in this unit. This book is an innovative approach to looking at U.S. history, and it presents ideas you could use with maps to teach that history.

History

Fernand Braudel, The Wheels of Commerce (New York, Harper & Row, 1982).
--An exploration of history and economics that supports the emphasis of this project on the city as an economic center, although it is narrower in its emphasis on one city rather than several as most significant at a time period.

William H. McNeill, Mythistory (Chicago: University of Chicago Press, 1986).
--An opportunity to consider what history is and how you shape it when you teach your students.

William H. McNeill, A World History (Oxford: Oxford University Press, 1979 [3rd edition])
--You will find the central role of the city explained clearly in this book, which also will provide you with a larger context for teaching U.S. history.

Invention/Connections

James Burke, Connections (Boston: Little, Brown and Company, 1978).
--Students can use this book and the videotape series based on it to trace the links between innovations, which they will find begin primarily in key cities.

David S. Landes, Revolution in Time (Cambridge: Harvard University Press, 1983).
--There are many ways to see connections through history, and this book traces time and time keeping so effectively that it is a useful history in itself and also an excellent model for looking at another area, such as transportation or communication.

This unit was developed through a grant from the National Endowment for the Humanities to DePaul University.

GLOSSARY OF TERMS

The economic model in this project was developed by William R. Waters, Professor of Economics, DePaul University, who has written the following explanations of the key economic terms related to this model and its application in this unit. They are presented in a logical order for comprehension of the concepts they deal with, and in teaching they could be introduced in a similar sequence in lecture and discussion.

ECONOMY The set of institutions in society that aid people in making decisions of: what and how to produce; what people need for their material wellbeing; who will receive what part of production; what proportion of output is to be devoted to consumption for immediate satisfaction and need and how much to investment or capital formation for improvement of their wellbeing in the future.

KINDS OF ECONOMIES A traditional economy is one where decisions are easily made because things are done the way they have always been done. A capitalist or private enterprise economy is one where decisions are made privately. More completely, there is private ownership of the means of production, private enterprise, and private credit to fund enterprise. Socialism is an economy where decisions are made socially, that is, with the wellbeing of the whole society in view. There are public (social) ownership of the factors of production, public (collective) enterprise, and public decision-making about the projects to be funded.

CAPITALISM An economy with these characteristics: private ownership of the means of production, private enterprise, and private credit. The market system, an important institution for making the crucial economic decisions, is not a key element. Theoretically, at least, we can imagine a socialist market system.

According to historical development, there are these kinds of capitalism:

A) Mercantile Capitalism, a partnership of business and monarchs with specific national regulation; very isolationist and protective.

B) Intact Capitalism, pure capitalism in that government intervention is minimized, innovators are comparatively free, as is the financial sector to finance them. Property rights favor allowing the innovators to use their neighbors' property freely even though the changes they introduce may harm neighbors.

C) Mature Capitalism, in large firms, personal entrepreneurship such as Henry Ford's or Philip Armour's is replaced by managementism. The owners—thousands of stockholders—don't make the crucial decisions. The financial system is controlled and regulated by society. A good proportion of output is produced by the large managerial firms that have their own financing acquired by retained profits. The corporations become more and more public and so are like socialist organizations. There is a dual economy: one half is the output produced by a few thousand large corporations; the other half is the output produced by millions of small and medium-sized firms.

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GLOSSARY (continued)

DECISIONS The operation of the economy is all decision-making. The creative economic decision-making called entrepreneurship is the most crucial because it changes the structure of the economy by introducing new things. Think of the entrepreneur as a chef introducing a new cake. He must coordinate the factors of production; workers, kitchen ovens and other equipment, ingredients; he must get the funding to pay for all of those factors. The consumers make decisions, too. Do they like the new products? There are, of course, many other decisions: those of the workers, sellers of the ingredients, owner of the kitchen, the approval of the banker or capitalist. Each innovation represents the result of the workings of a complex network of human decision-making.

SPECIALIZATION Technological improvement, and thus more efficient production, occurs by dividing labor into more specialized activities. For example, a more effective baseball team will use a left-handed pinch hitter to bat against a right-handed pitcher. An advantage of specialization in production is dexterity. Nations also specialize—Portugal in port winemaking and the Netherlands in tulips. This specialization means a higher quantity and better quality of output.

STRUCTURE OF THE ECONOMY An economy's labor is divided into primary, secondary, and tertiary. Primary is agricultural, mining, and fishing; secondary is manufacturing and processing products; tertiary is employment to produce services. A region can be considered rich according to how high the tertiary employment is in relation to the total. Now 70% is the U.S. rate of tertiary employment, with about 5% in primary and 25% in secondary. In contrast, in 1820 about 65% of the U.S. work force was in primary employment.

OUTPUT The difference between a rich and poor country is the amount of good quality goods and services it can produce. This is called output or gross national product. Related is the country's income, the claims to output. If a country (or region) produced an annual output of $100 billion, then its income, or claims to that output, is $100 billion. A nation's output consists of production for current consumption and for the future (investment). So output equals consumption and investment. The proportion of output devoted to the future (investment) determines the growth of the economy.

CONSUMPTION Goods at the end of the productive process. The demand of the household sector of society. Businesses work to create demand for their products. This is a part of the developmental process. They try to persuade consumers that they should have computers, trips to Australia, and many other things.

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GLOSSARY (continued)

INVESTMENT The key to development is investment or capital formation, which is the production of new construction, equipment, or inventories. If businesses "invest" to form new kinds of capital goods, then development will take place. If they are reluctant, a business recession can occur. If they desert a region, it will stop developing. Such a phenomenon recently has been called the "British Disease" because of the Britain's poor record of economic development in the past 100 years.

SCARCITY The condition where the desire for products is greater than those available. It is not wholly a matter of poverty or deprivation; it is a matter of unsatisfied wants. For example, we have a scarcity of water in some parts of the United States; we have a scarcity of medical services meaning we could use more than presently being made available.

CITY and **CITY ECONOMY** Economies have essential parts: 1) a populous urban area with a core where the most important decisions for the region are made concerning commerce, industry, transport, and finance—in short, the decisions that cause the region to develop; 2) a hinterland of primary production; 3) satellites producing manufacturing and tertiary products. In our day, Atlanta, San Francisco, Los Angeles, and Dallas are examples of developing city economies. Within the city economies are lesser economic capitals called submetropolises. Seattle and Honolulu are examples of submetropolises in the San Francisco city economy, mainly because San Francisco is the important financial capital of the West.

INNOVATION The introduction of a change into the economy. An example is the steam locomotive railway as a new form of transportation. Innovations will be resisted because they damage established techniques. For example, stage coach companies resisted railroads.

FINANCIAL INTERMEDIARIES This name is given to banks and other organizations in the financial sector because they act as an intermediary between a household and business to collect funds for investment. Financial intermediaries include insurance companies, banks, brokerage houses, pension funds, savings and loan associations, and credit unions.

BALANCE OF PAYMENTS A comparison of a region's or nation's revenue and expenditures, including the sale and purchase of products and the flow of funds to buy and sell properties or assets. A successfully developing country may have a deficit in its balance at first, but after some time the balance should reflect a surplus. Citizens in the "creditor" nation or region will begin to own more and more of the other region's property.

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GLOSSARY (continued)

PRODUCTION POSSIBILITIES Nations and regions continually made tradeoffs of high level consumption now or more wellbeing in the future. If the people in society make the choice of consumption now, they are putting off investment. If instead they put off consumption and use resources to increase capital stock (plants, roads, schools), they have decided to invest now to increase the wellbeing of the people in the future.

DEVELOPMENT The change in the structure of the economy as compared to growth, which is just a change in sizes. By illustration, the structure of the U.S. economy changed when railroads were introduced. To produce a large quantity of railroads and other things that already exist is to grow. Development is a change of output, for good or for bad. Growth is more of the same kind of output we have. Development increases the options people have. After railroads came, the people could choose yet another mode of transportation in addition to stagecoach, steamboat, sailboat, and horse.

COMPETITION In economic activity, both competition and cooperation are needed for effective performance. Cooperation to establish community and solidarity necessary for a humane economy and society. Competition to heighten motivation and eliminate waste, thereby bringing about development to improve the material wellbeing of the people. There are other kinds of competition in addition to firms competing with each other. Cities also compete. It was not clear which city would become the economic capital of the Midwest, St. Louis or Chicago. Nations also compete. Some evidence of their success is a surplus in their balance of payments of exports and imports. Most important to development is dynamic competition, that is, competition to innovate. DuPont was of one of the most dynamically competitive firms in the 1950s. The firms of the Silicon Valley, near San Francisco, were dynamic competitors of the 1980s. The core idea of dynamic competition is not the product but that the firm is more successfully innovative than the other.

INTERDEPENDENCE Economic regions are integrated in that the farmers and miners in the hinterland and the manufacturers in the suburbs look to the city for financing and for upper-echelon managerial decision making. For example, in the first half of the 19th century, the New York region extended up the Hudson and along the Great Lakes to Chicago. With fur trading, the region extended all the way to Astoria, Oregon, on the Columbia River. The river network with Philadelphia, St. Louis, New Orleans, other river cities, and the Ohio, Mississippi, Illinois, and Missouri Rivers were parts of another region that also had a social integrity and communal spirit of its own. Business owners, river boat crews, farmers around Louisville, cotton growers in Mississippi had their economic region in common, as did canal workers and sailors on the Great Lakes, manufacturers of the reaper in Chicago, and bankers in New York.

This unit was developed through a grant from the National Endowment for the Humanities to DePaul University.

THE SCHUMPETER/GRAS MODEL

This model of economic development was originally introduced to the study of the American city in "Choices and Changes: the Building in Chicago," a project sponsored by the National Endowment for the Humanities. William R. Waters, Professor of Economics, DePaul University, developed the model and has clarified it in the following section for this project. The model incorporates ideas of Joseph Schumpeter and N.S.B. Gras. This more complete explanation can be used in discussion in conjunction with the case studies in this unit.

STARTING POINT—What is important in the economy?

Why people act:

There are some few people who want to make changes. The majority either doesn't care or resists the changes. The motives for change are many: profits, glory, the good of the city, nation, or mankind.

The role of the government:

The economy does not develop independently of government. Government sometimes limits or sometimes encourages change in the economy through laws and law enforcement as well as the financial decisions it makes. This role is critical and must be recognized by someone who wants to bring about economic development.

Business Cycles:

Innovational investment is sporadic. A clustering of investments, due at times to high and low "animal spirits" of businessmen brings ebbs and flows of business activity. These business cycles include the regular cycles of 8-10 years and longer ones, called Kondratieff waves, which are about 50 years long.

THE CHANGE—What is necessary for development?

<u>An Urban Center</u>

Major innovations in economic development take place in an urban community that is an economic center for a region. This city dominates the commerce, industry, transport, and finance of the region. This center has the leadership resources of the region to support the development as well as the financial assets of institutions to pay for it.

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SCHUMPETER/GRAS MODEL (continued)

What is necessary for development? (continued)

Entrepreneurship and Innovation

Development takes place when a creative organizer has a vision to do something differently. An innovating entrepreneur introduces this vision, coordinating the factors of production needed for the innovation. This action disturbs and destabilizes society. Such innovators are private businesspeople, public officials, or communal activists such as Jane Addams or Samuel Gompers.

Credit Creation

The innovation requires funding, and the banking system's job is to supply it. Banks make savings available to business. They also create credit, making use of savings as the base for lending more money than they actually have on account. Without funding, innovation will not take place. Funding is not automatic.

Resistance

Innovations hurt some members of society because they introduce competing products or structures. This negative effect is called "creative destruction." People who think they will hurt by an innovation resist the change. Consequently, producers work to create demand for their innovation in order to break the resistance.

Political Support

Government is often a partner in the process of development. On the other hand, government can restrain development by passing unfavorable laws, deciding court cases in a non-supportive way, or by creating a stormy business climate that discourages investment. Political integration and stability are crucial to the development process.

Progress and/or Problems

By increasing consumers' options, improving producers' productivity, and introducing new forms or organization, innovations bring improvement in material welfare. Or, at other times, they diminish welfare. In either case, there has been change: this is the economically dynamic or developmental process.

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SCHUMPETER/GRAS MODEL (continued)

KEY IDEAS TO FOCUS ON IN THIS MODEL:

1. Economic development results from private and/or public innovation. In public innovation, what we call the entrepreneur is an innovative public official.

2. Development won't occur without funding, so the banking system (or some substitute such as corporate profits or public tax revenues) is crucial. Historically, in the private enterprise economy, funds have been created.

3. Cities are usually the location of the funding and the decision making because that is where important banks are. Banks make the households' saving available to business, but they are more than that. They create credit, a procedure so important that Schumpeter calls credit creation "the monetary complement of innovation."

4. The government is almost always involved to either support or resist the innovation.

5. Resistance is always present because, after all, there are people who are harmed. That harm is called creative destruction, and it is a source of conflict.

6. The standard of living rises due to creative economic activity. Schumpeter calls this process a creative response to changing economic conditions. There are also times when the standard is lowered.

7. While Adam Smith believed that an "invisible hand" (the market process) promotes the improvement of wealth of the nation, Joseph Schumpeter believed that entrepreneurial activity would bring about that development. There are several important differences between the views of Adam Smith and Joseph Schumpeter, and most of them relate to Smith's general view that the economy would manage itself and develop automatically if given the freedom to do so. In contrast, Joseph Schumpeter believed that people had to bring about changes that would result in economic development and that this process was not automatic.

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TEACHING NOTES

This section includes information and ideas for discussion and projects related to the student activity sheets.

Preview (Pages 5-6)

Focus: The unit preview introduces the city as an economic center, but it is much more—a center of culture, government, politics, and religion. Ask students to identify cities important to the American culture and to tell how those cities function as cultural centers.

Project: Ask students to make their own post-test on the unit, beginning with the ideas presented on page 5.

Keys to History (Pages 7-8)

Focus: The terms in the glossary are presented in a kind of time line, but they really fit every time period. Each one deals with an important aspect of economics that students should consider when they examine economic development.

Discussion Topics: Each term is important enough to justify a separate discussion, but of course your time is scarce. So choose the ideas that are most in need of clarification. While it may seem that you should discuss the more technical terms, such as human capital or infrastructure, those terms are not as likely to need clarification as terms that are in common use. Often, because they are so common, those ideas are simplified or too general for full comprehension.

For example, scarcity is one term that is used so basically in economics that every economic activity seems directly related to it. It may appear to be the economic motive for every development. But scarcity does not necessarily lead to innovation. In fact, many innovations of the age of exploration were fostered for trade. For example, the Portuguese combination of using sail instead of human energy to propel ships and the cannon aboard ship to knock any oar-driven ships out of the water combined to give them the power to break up the Islamic monopoly of trade in the Indian Ocean and East. Economic motives are more complex than a response to scarcity, though they may involve that response too.

Another example is capital, which many people would define as money. While people may use money to pay for capital, it means something else. It has to do with the potential for further production—unlike consumer products. It is human or physical. There are several ways to classify capital. Construction, equipment, and stocks is one way. Another classification is Directly Productive Capital (DPC), such as plant and equipment for manufacturing textiles, and Social Overheard Capital (SOC) or infrastructure. The infrastructure includes transportation, education, public utilities, and other facilities that support the production.

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What is Invisible and Everywhere (Page 9)

Focus: This activity sheet presents a simplified version of the Circular Flow Model, a way to show the connections among parts of an economy.

Discussion Topics: Ask students what is missing from this model. Point out that the page discusses government's role in the economy, but that it doesn't have a space on the diagram. The students should add government as a source of employment and products.

Some economists view government as a drain on the economy, and other view it as a vital participant. Discuss the position of government in the economy of the United States and in the economy of other countries—past and present.

Projects: While you could spend some time developing the circular flow model (you will find it illustrated in economics texts), the emphasis of this presentation is on the interconnections among the parts of the economy. So it would be more useful for students to diagram the connections involved in the production of just one product. They could construct a flow chart or use the same circular flow model to show the companies, workers, and funders involved in the production of one item, such as a movie.

Change: One View (Page 10)

Focus: This model is based on the work of Adam Smith and other economists who believed that the economy would grow automatically if unrestricted by regulations such as barriers to trade.

Discussion Topics: Adam Smith was an economic innovator when he published The Wealth of Nations in 1776. Based on what students know about the restrictions on economic activity by governments in Europe at that time, point out the revolutionary nature of Smith's proposal that government should have a far more limited role in the economy.

Projects: The argument about government's role in the economy has been continuing since long before Adam Smith wrote—and probably will continue long after your students finish this course. Often the different sides in this argument are stated very simplistically, without regard to the long-term consequences of intervention or non-intervention by government in the economy. Ask students to make a survey of the effect of economic intervention and non-intervention by government at different times in American history.

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City Centers and Economic Development (Page 11)

Focus: This page introduces the model of economic development that is central this project.

Discussion Topics: The profile of the model on pages 32-34 provides an outline you can use to organize further study of it. In this model, at the heart of the process of change are three things: the vision, innovation, and funding. The middle factor is most crucial because the innovation (or introduction of the vision into the economy) requires that scarce talent of organization ability—the coordination of agents of production, the launching of the idea, the breaking of resistance, and the creation of demand. But the others are important. They are conditions without which there is no development. The vision is the idea or invention. The third element, funding, typically comes in response to the innovation. It does not precede it. (That sequence is one major difference between the economic views of Adam Smith and Joseph Schumpeter. Smith believed that the funding would precede the development, not be in response to it.)

Project: Have students make an economic geography/history map showing significant innovations and the cities that supported their development. They will have to research this map, and they can find the information by studying the history of major cities or by tracing the development of important innovations, such as the introduction of the automobile.

The City Center: Boston (Page 12)

Focus: There are two main ideas in this presentation: 1) a major economic center does not develop accidentally; 2) Boston became a center not just for its immediate area but for a whole region.

Discussion Topics: Boston was not just an economic center, but also a cultural, governmental, and political center. Its early development was closely related to its economic geography: its location and natural resources. The most important reason why Europeans came and settled on the North American shores was the exploitation of cod fish along the bank of Newfoundland and New England. Portuguese, French, and English ships were there, participating in an important innovation, the opening of a new source of supply, codfish. The English came upon the shore more than the others in the earliest years of the 16th century, perhaps because the English didn't have abundant supplies of salt and brought the fish ashore to dry before returning to Europe. At any rate, this activity was at the heart of Boston's early development. The "sacred" cod still hangs in the legislative halls of Boston as a symbol of the origin. Two commercial companies stand out in the early history of the Boston region's development. The Plymouth Company (a part of the Virginia Company) whose "merchant adventurers" sent the pilgrims and the Massachusetts Bay Company sent the Puritans to build Boston. "Merchant adventurers" were the capitalists or fund raisers. They lost money on these adventures and most all other such projects to develop North America.

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The City Center Boston (Continued)

Discussion Topics: Boston's economy grew more complex and interconnected with other economies. Boston merchants sent cod to Spain for precious metals and spent the gold and silver for manufactured goods in England, which they brought back to Boston. Also, they sent the poor quality cod to the West Indies to feed slaves working on sugar plantations. They brought sugar and took it to England in trade for manufactured goods that they brought back to North America.

Boston entrepreneurs started to manufacture rum from the West Indian molasses (sugar). Of great importance to Boston, they started shipbuilding. Before long, New Englanders could build sailing ships at half the cost of the English ship builders.

Projects: Suggest that students begin a file of newspaper and magazine articles on cities today. They should use the file to indentify key problems and opportunities for economic development today. Point out that development brings problems as well as progress. Then ask them to write news articles about Boston's development that might have appeared in a newspaper there in 1750.

City Connections: River Transportations (Page 13)

Focus: The page profiles one innovation with a framework based on the project model.

Discussion Topics: John Fitch launched an ingenious, odd-looking steamboat (it looked like a water bug) to ply the Delaware River between Trenton and Philadelphia in 1786. Unfortunately, however, this launching was 20 years before the state of the technical arts made such transportation feasible. Fitch's work took place in Philadelphia when that city was the prime economic city in the United States. The steamboat became practical in New York at a time when that city had replaced Philadelphia as a prime city.

The important point is that business innovation has a bad success record. Far more such attempts at innovation are unsuccessful than successful. Sometimes such innovational activity fails because the innovation is ahead of the state of the technical arts. For example, Leonardo da Vinci's design for a submarine was 450 years ahead of its time.

Project: Ask students to use the same outline to profile an innovation that succeeded on a very large scale: the United States.

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City Connections: Railroad to Chicago (Page 14)

Focus: This activity restates the model in terms of another major innovation—the railroad.

Discussion Topics: As far as we know, Ogden was both the man of vision as well as the entrepreneur in the development of the railroad. However, the railroad he planned was not the railroad he built. The situation changed while it was under construction. Instead of giving up, Ogden responded with a modified plan. When Ogden and his partners set up the railroad, their object was to exploit the lead in Galena, Illinois. By the time the railroad was completed for ten miles, the mines were worked out. So the road was pushed to the Mississippi River at Fulton, where it provided an important link for shipping goods.

Point out that William Ogden served as the mayor of Chicago. Ask students how much of an asset that position might have been and how much of a liability.

Project: Ask students to write a reply that Ogden might have written in response to this letter to the editor from The Democrat, February 16, 1848.

"…Now, in place of the railroad now agitated, construct three hundred miles of plank road…This will not cost more than $500,000, about what it will cost to build a good railroad to the Fox river…When the road is worn out (ten years hence) we would have a city containing seventy thousand inhabitants. Then we might talk of a railroad. One of the reasons most argued with those in favor of the proposed railroad to Fox River is that if we don't build one, Milwaukee will. The people of that city are not able to build a railroad of any length; if they were, they are not so simple."

Farming Progress in a City: McCormick's Reaper (Page 15)

Focus: There is an interrelationship between a city and its hinterland, and developments in a city influence and are influenced by that hinterland.

Discussion Topics: The manufacturer of agricultural implements started very early in Chicago. In 1833, blacksmiths began to make "prairie plows." In 1845, Charles M. Gray was providing grain cradles and scythes that had wide popularity. With a partner, he obtained a contract to manufacture the "Virginia reaper" invented by Cyrus McCormick. It was in demand immediately.

By 1847, McCormick was a partner. He had the vision to see that Chicago was the strategic location to produce his invention, so he came there from Virginia. His decision to come to Chicago rather than go to St. Louis, Cincinnati, Cleveland, or Milwaukee gave Chicago its real start as the most important center of farm implement manufacture in the world. In the 1960s, Chicago lost this position to foreign producers.

Just as the cotton gin greatly increased production of cotton in the South, so the reaper increased the production of wheat in the Midwest—to the advantage of Chicago. The city remains the grain capital of the world with the commodity features and options markets there.

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Social Change: Hull House (Page 17)

Focus: While this presentation deals with one innovator, it represents a kind of innovation (social change) as well as the effects of other kinds of innovation (the deterioration of the parts of an industrializing city).

Discussion Topics: We may call Jane Addams a communal entrepreneur, someone who innovates to change the structure of the economy and society by whom operates outside of the "for profit" sector of the economy as well as the public sector (government). Daniel Burnham's plan for the beautification of Chicago's lakefront might be another example.

Addams' plan to help the poor in Chicago has a redistribution of income effect. Through Hull House's activities, Addams gave a little but more of the national product to the poor.

While Hull House was the first settlement house in the United States, it was not the first one in the world. Jane Addams actually got her idea for the settlement house on a visit to England, so this project is an example of an adopted or adapted idea.

Project: Whatever the economic conditions in the neighborhood of your school, there are social problems there. Invite a representative of a community group or agency to discuss with your class that organization's agenda for the community.

Labor Change: The Haymarket Conformation (Page 19)

Focus: The activity presents one episode in an ongoing effort by representatives of labor.

Discussion Topics: The issues involved in Haymarket really are too complex to be summarized in just two pages. But the kind of dissatisfaction and distrust that were part of that struggle are clear in the statements and events recorded here.

The crucial labor entrepreneur was Samuel Gompers and the significant innovation was to restrict the trade union movements to raising wages and to refrain from efforts to change the economic system. Labor in most countries tried to make the system more beneficial to the working man by transferring ownership of large firms to the government and thus eliminating the share of income (profits) going to capitalists. Gompers led American labor to work within the private enterprise (capitalistic) system but to get the working man who joined the union a larger share of the income pie. The emphasis would be on raising wages and reducing the work week.

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Labor Change (Continued)

Gompers (1850-1924), born in London, was a cigar maker by trade. He was one of the founders of the American Federation of Labor in 1881. This union, like other American unions influenced by Gompers, was non-partisan. It stayed out of politics in the sense that it had no political party or ran no candidates. But it did support candidates who were more favorable to the working man. Samuel Gompers and his union were political, therefore. Gompers used his influence to get legislation beneficial to wage earners.

Consequences of Change: The Auto and the Airplane (Page 21)

Focus: Major innovations have major impact not only on the metropolitan area that supports their introduction, but on the interconnected parts of the economy throughout the country—and often the world.

Discussion Topics: The automobile and the airplane had great effects upon the respective central city that happened to serve as the locus for the major innovations. Although it is changing somewhat, still the greatest proportion of American autos is made in the greater Detroit area. That development helped to make the Midwest the industrial center of the United States.

As we would expect of one of the greatest causes of development in the 20th Century, there were countless inventions, innovations, and secondary innovations related to the automobile. The prime invention, the Lenoir-Olto internal combustion engine was a French idea, but was best exploited by American innovators.

An innovation of greatest importance was Ford's Model T. This light, cheap, 4-cylinder black car for everybody was introduced in 1908. With it, Henry Ford created a demand for automobiles. Potentially, with this model he could sell to every family in the U.S. and to many in the rest of the world. Ford pioneered in paying a five-dollar-per-day wage, above the pay scale in effect. He advocated profit sharing. Both of these innovations would affect management and workers in many industries. Ford initiated the assembly line for putting automobiles together, an innovation that doubled and tripled daily production.

General Motors originated the multidivisional corporate structure, which made General Motors an even more efficient producer than Ford's firm because the individual division, such as Chevrolet and Pontiac, was fairly independent and competitive with each other. By 1935, 90% of the cars produced were made by these two companies and Chrysler.

Secondary innovations included the rubber industry to supply tires, gasoline (a product of the petroleum industry that didn't exist before the auto), and the growth of the suburbs as we know them today. Before the car, suburban development was a matter of residential construction along railroad and streetcar lines, a rather narrow strip.

Project: Ask students to diagram the impact of one major innovation on the economy, showing creations as well as destruction.

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Economic Development: One City Neighborhood (Page 22)

Focus: This activity restates the project themes on the scale of innovation in one metropolitan neighborhood.

Project: Ask students to consider different points of view on change within one neighborhood. They can develop this approach in two ways. They could project the positions of different members of a hypothetical or actual neighborhood. They also could interview members of their own neighborhood about changes taking place there—and proposed.

Framework for Developing a Case Study (Page 24)

Focus: This activity clarifies the project themes in an outline students can use to organize their own case study.

Project: Students could work on this activity in conjunction with the study of different time periods in history. At each time period they will find significant innovations based in important cities. They also can use the outline to profile changes in their own metropolitan area today.

MUSEUM CONNECTIONS—A Unit Project

Students will find that exhibits at the Historical Society, Natural History Museum, and Science Museum have an important connection with the themes if this unit. Here are some of the approaches you can take to connect those exhibits with your students' work on this unit:

Historical Society: Divide the class into groups, each one to a different time in your city's development. Have the groups collect information directly from the objects on exhibit about that time period, recording their observations and inferences as they study the exhibit. Then ask each group to identify what they see as the important innovations in the city as each time period—and the secondary innovations based upon them.

Natural History Museum: Have students look for evidence of innovations in the exhibits. For example, when they find the introduction of glass beads in North America, they will probably be able to locate other objects that show that Europeans had arrived here, bringing objects and ideas that represented the major European cities. Ask students to look for objects that represent ideas the Europeans might have taken back to Europe, too.

Science Museum: Have students look for shared ideas that have been the basis of secondary innovations. For example, they will find the same ideas—the simple tools of the wheel and inclined plane—in many applications today.

General Discussion Points: Why have cities set aside resources for these places? How do they represent and reinforce the city's position as a regional center? Then turn the city into a museum. Discuss other buildings in the city, what the size, style, and other features of those buildings show about the nature of the city at different times.

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