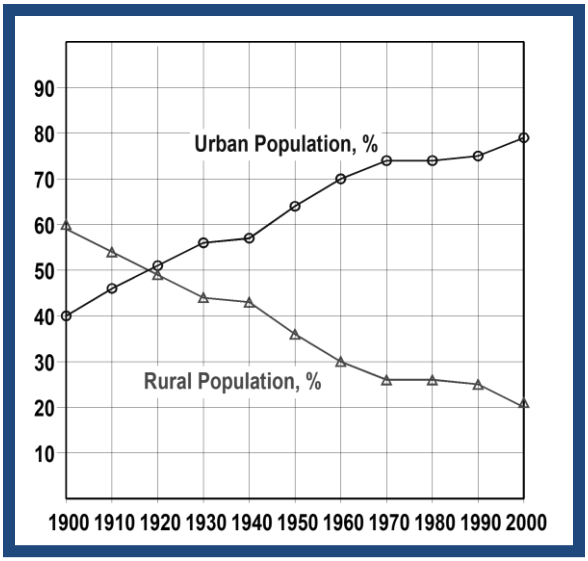
System Change/Cities, 1945-1990

In 1790, over 90% of Americans lived on farms and in small villages. Now, most live in cities or the surrounding metropolitan areas. The graph shows changes in population distribution since 1900.

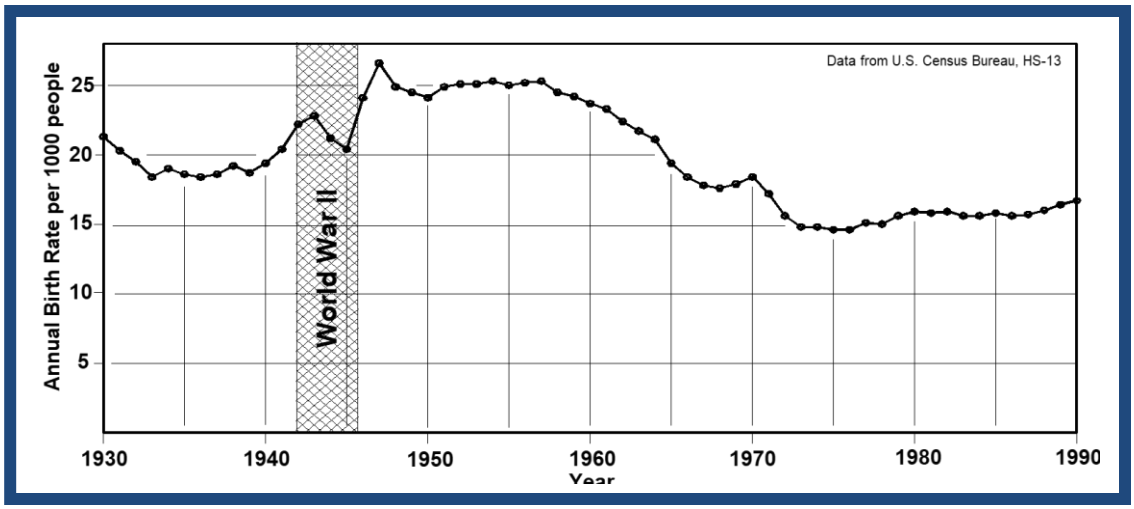


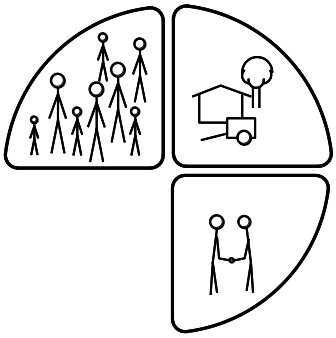
Cities are systems, and after World War II they underwent major changes. In this group of investigations, you'll identify some of these changes, and find ways in which they are interrelated.

The Model for societies you've been using throughout this course will give you the main system elements for investigations in this part.

Investigation: Changes That Affected Cities

Analyze each data piece (through Page 8), identify the changes, and express each in a brief statement. (Some data may show more than one change.) You'll be using these statements later for entries in a system diagram.





Beginning in 1947, the William J. Levitt Company began constructing residential housing on Long Island, east of New York City. Fields that once grew potatoes were converted to curving streets lined with small, low-cost houses. Although famous for its size and early success, Levittown was only one of tens of thousands of similar developments across the U.S.

With few exceptions, cities in the U. S. were surrounded by new real-estate developments like the one in Florida shown below (1958).

Infer probable relationships between this change and the birth rate graph (Page 1).

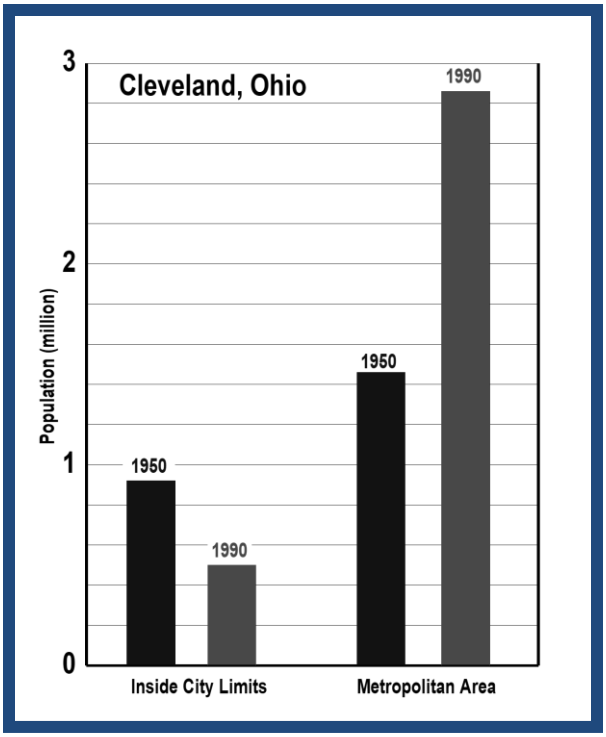
Change in Manufacturing Jobs from 1950 to 1990 in Four Cities:

City	1950	1990
Baltimore		
Manufacturing	113,618	38,602
All job sectors	391,487	314,688
Detroit		
Manufacturing	348,986	68,830
All job sectors	758,772	335,462
Philadelphia		
Manufacturing	291,312	88,466
All job sectors	827,245	651,621
St. Louis		
Manufacturing	124,432	24,393
All job sectors	366,524	161,434

Data: U.S. Census

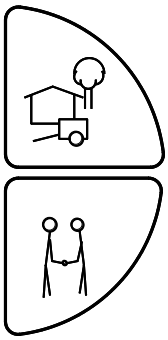
Demographic change after World War II is shown in the graph (for a typical city) and table (next page).

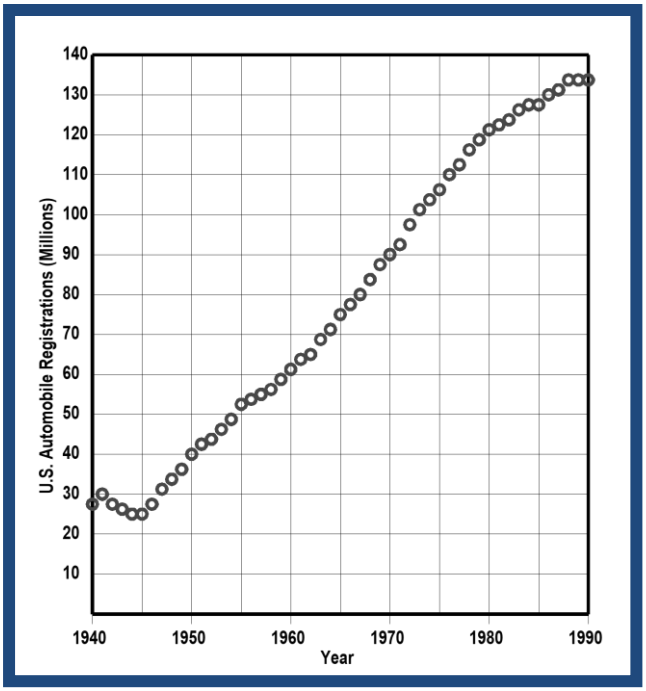
Some cities (such as Los Angeles) were able to expand their borders to include surrounding territory, so population decline sometimes doesn't show up in statistics.



City	City Population 1950	1990	Metropolitan Area 1950	1990
New York City	7,891,957	7,322,564	14,018,852	19,549,649
Chicago, Illinois	3,620,962	2,783,726	6,869,699	8,239,820
Philadelphia, Pennsylvania	2,071,605	1,585,577	4,071,814	5,893,019
Detroit, Michigan	1,849,568	1,027,974	3,421,766	5,187,171
Baltimore, Maryland	949,708	736,014	2,869,488	6,726,395
Cleveland, Ohio	914,808	505,616	1,465,511	2,859,644
St. Louis, Missouri	856,796	396,685	1,719,288	2,492,348
Washington, D.C.	802,178	606,900	See Baltimore	
Boston, Massachusetts	801,444	574,283	3,456,063	5,455,403
San Francisco, California	775,357	723,959	2,531,314	6,249,881
Pittsburgh, Pennsylvania	676,806	369,879	2,213,236	2,394,811
Milwaukee, Wisconsin	637,392	628,088	1,066,533	1,607,183
Buffalo, New York	580,132	328,123	1,089,230	1,189,340
New Orleans, Louisiana	570,445	496,938	685,405	1,285,262
Minneapolis, Minnesota	521,718	368,383	1,151,053	2,538,776
Cincinnati, Ohio	503,998	364,040	1,051,605	1,817,569
Kansas City, Missouri	456,622	435,146	814,357	1,582,874
Newark, New Jersey	438,776	275,221	See New York City	
Louisville, Kentucky	369,129	269,063	576,900	949,012
Rochester, New York	332,488	231,636	487,632	1,062,470
St. Paul, Minnesota	311,349	272,235	See Minneapolis	
Jersey City, New Jersey	299,017	228,537	See New York City	
Akron, Ohio	274,605	223,019	See Cleveland	

This shows the number of automobiles in use in the United States from 1940 to 1990.





Below: A shopping mall immediately after construction ended in 1963. Construction of these kinds of shopping facilities expanded rapidly after 1945.

Urban transit systems—mostly buses and light rail such as trolleys or subways—are generally owned by city governments, with costs paid by a combination of fares and taxes. For American cities, this table shows the percentage of local travel using public transit.

Public Transit Share of City Travel	
Year	**Share**
1945	35%
1955	10%
1965	5%
1975	3%
1985	2.5%
1995	2%

For a week before Thanksgiving, the huge windows in the front of Polsky's and O'Neil's Department Stores were covered over, so passers-by couldn't see the magic being created behind the glass. They were the two biggest stores in town, each with five or six floors linked by escalators. The stores faced each other across Main Street. In those days, "going shopping" meant going downtown, and almost always required a trip to one or both stores.

For kids growing up in Akron, Ohio after World War II, every Thanksgiving holiday was capped off by climbing on a city bus to travel downtown, joining the crowds gathered to see Polsky's and O'Neil's windows when they were unveiled.

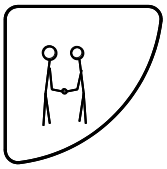
The two stores tried to out-do each other, creating animated worlds of toy-building elves dressed in red and green, angel choirs bursting into song, or Santa unloading presents from his sleigh—different every year, and always spectacular.

Polsky's and O'Neil's are gone. Polsky's closed in 1978, and the building sat vacant for the next several years. O'Neil's managed to hang on for another ten years, but eventually also closed. The buildings are still there, converted to offices and university classrooms.

Akron wasn't unique. In city after city, shopping was done downtown in elaborate, multistory department stores that sold clothes, appliances, furniture, housewares, and much more.

But now, in all but a few very large cities, downtown department stores are gone. In Newark, the original Kresge store closed in 1964, Ohrbach's closed in 1974. Bamberger's lasted until 1992, but now is also gone. In Baltimore, Hochschild-Kohn's Department Store closed in 1977, followed by the four other main stores, the last in 1989. In Detroit, Hudson's closed in 1983. The same story—the closing of big downtown stores—has been repeated over and over, in almost every city across the entire United States.

Add "closing of downtown stores" to your list of city changes. Then identify and list the city changes that led to the closings, and changes that probably followed, such as changes in downtown property values.



City governments provide a variety of services for citizens, and pay for these services in a number of different ways. The table below shows typical city services, and the way each is financed. (Many cities have other services not listed, such as city-run schools and hospitals.)

Division	Section	Financed by
Administration	City Officials	Taxes
	Support & Information Services	Taxes
Public Works	Water	User fees
	Sewage Disposal	User fees
	Streets, Bridges, Storm Sewers	Taxes
Public Safety	Fire	Taxes
	Police	Taxes
	City Courts	Taxes, fines
Other Services	Parks & Recreation	Taxes
	Planning & Zoning	Taxes, user fees
	Community Development	Taxes
	Public Transit	Taxes & fares
	Libraries	User fees & taxes

The most common city taxes are those paid by property owners, based on the value of the property they own. Some cities have sales taxes, and some tax the income of residents.

Infer and list: (a) effects of city changes you've identified on city tax receipts, (b) effects of tax changes on city services, (c) effects of changes in city services on other aspects of life in the city.

I first saw New York City's south Bronx in 1971, coming across the expressway from LaGuardia Airport on my way to northern New Jersey. I could hardly believe what I was seeing. It reminded me of photos of bombed cities in Germany at the end of World War II. Some buildings were becoming ugly piles of bricks. Rubble, trash, and burned-out or boarded-up multi-story buildings covered a vast area.

The area was an extreme case of what was happening in city after city across the U.S. In 1972, a news article written by Paul Good reported:

> Inner cities across America are dying on their feet and creating their own gaunt tombstones in the process.
>
> The tombstones are abandoned buildings, hundreds of thousands of them in Boston, St. Louis, New York, Philadelphia and dozens of other urban centers. Their numbers have been growing for years, turning once-decent neighborhoods into civic graveyards.
>
> But where once abandonment was an isolated phenomenon that followed in the wake of a riot or some special problem, it has now assumed epidemic proportions that defy city, state and Federal efforts at control…
>
> Now owners have fled, driven away by an infernal combination of unprofitable properties, rising municipal taxes, racial fears and a general atmosphere permeated with decay. Tenants are gone and in their place have come armies of rats and human derelicts—junkies, vandals, petty criminals and arsonists…
>
> Initial efforts to salvage old but serviceable inner-city housing focused on stiff building-code enforcement. But faced with costly repairs and limited revenues, landlords simply walked away in droves from their properties.

The problem of urban decay has been most significant and persistent for the old industrial cities—Detroit, Baltimore, Philadelphia, St. Louis—but has affected most cities, even small ones.

What conditions might have led to urban decay? What other changes might grow out of the conditions identified here? Add these changes to your list.

What effects would changes you've identified have on low-income families living in the cities? On families with good incomes? Add these effects to your list.

Investigation: Identifying Systemic Relationships

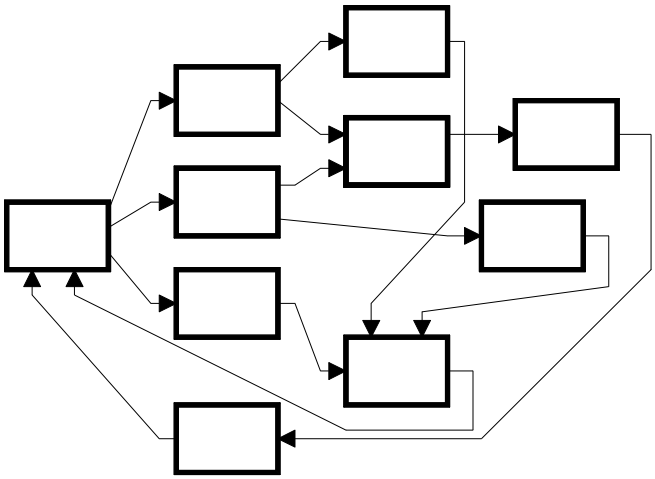
At this point, you've accumulated a list of changes occurring in many American cities between 1945 and 1990. ***Write each change on a separate small square of paper. Small "Post-It™" Notes work well for this.***

Arrange your squares on a larger sheet of paper or poster board so related cause-effect changes are close together. (Don't stick them permanently in place at first, so you can move them to make changes.) Arrange all your squares as logically as possible, then draw arrows connecting causes and effects.

Take your time, and be prepared to make changes and additions. You'll probably discover that you need to add blocks for other changes growing out of those you've identified.

As in the previous System Change section, each effect may have more than one cause, and each cause may have more than one effect.

Important: Make sure you identify circular cause-effect relationships, where later changes loop back and reinforce earlier changes. For example, a decrease in the quality of city services could cause those who could afford it to move away from the city. Fewer people in the city would cause a loss in tax money, which would further reduce city services. (You'll be more specific about these changes in your diagram. When you're finished, your diagram might look a little bit like the one shown below, but probably with more blocks, arranged and connected differently.)



Keywords for Internet/Library Investigation: Urban blight, urban transit, urban renewal, public housing.

Investigation: Urban Renewal

Some cities have been at least partly successful in solving problems you're investigating. Many have "revitalized" downtown areas, replacing blighted areas with sports arenas, auditoriums, or other new construction. Not all such efforts have been successful. In fact, sometimes attempts to solve city problems have created new problems as difficult to solve as the old ones.

Study your system diagram, looking for solutions to urban problems. List some possible recommendations.

Then consider: Where would the money come from to make the changes you propose?

What additional system changes might grow out of the changes you propose?

If you have access to the Internet, a brief history of urban renewal in one small city (Lancaster, Pennsylvania) is shown in pictures at: http://www.fandm.edu/david-schuyler/changing-face-of-lancaster.

Investigation: Here and Now

Your own town or city (or the one nearest to you) is a complex system, with relationships between taxes collected and spent, location and success of stores, quality of life, safety, beauty, convenience—everything affecting the life of the people who live there and the people who visit.

Investigate changes in the downtown area in the past 10 years. Is it staying about the same, improving, or deteriorating?

1. ***Identify changes in population in and around the town or city.***
2. ***Investigate city-provided services. If possible, obtain budget figures to find how much money is being spent on them. Is this spending increasing or decreasing?***
3. ***Identify ways in which your area matches (and fails to match) changes in your city system diagram.***

Acknowledgements/Sources:

Page 1: U.S. Census Bureau, *Statistical Abstract of the United States, 2003*, Mini-Historical Statistics, Table HS-13, p. 21. **3:** Satellite Beach, Florida, ca. 1958. Sterling Hawks **4-5a:** U.S. Census Bureau, **5b:** United States Department of Transportation, Federal Highway Administration, www.fhwa.dot.gov/ohim/summary95/mv200.pdf. **5a:** Photo of Brevard Mall, Melbourne, FL, 1963, Sterling Hawks **5b:** Wendell Cox, "Breach of Faith: Light Rail and Smart Growth in Charlotte" www.publicpurpose.com/charlotte.htm. **8:** Photo courtesy www.filthymess.com. Quote from Paul Good, "America's Dying Cities" Cocoa, Florida *Today*, December 7, 1972.

Notes for Teachers/Mentors:

This unit is designed for use after learners are familiar with the entire Model, either through use of *Introduction to Systems* or *Investigating American History.*

(Note: The symbols used for the Model differ a bit between *Introduction to Systems* and *Investigating American History*. In *IS*, the icon for environment/setting is on the upper left, and the icon for people/demography is on the upper right. In *IAH*, and in this document, these are reversed. For students coming from IS, point out the difference. This difference should not create problems, since it is superficial.)

Jay W. Forrester, in a 1971 paper, "Counterintuitive behavior of social systems," file:///C:/Users/Howard%20Brady/Documents/Education/General%20resources/System%20Change%20stuff/Forrester%20counterintuitive%20behavior.pdf points out additional negative systemic effects associated with cities in this period:

> The investigation showed how depressed areas in cities arise from excess low-income housing rather than from a commonly presumed housing shortage. The legal and tax structures have combined to give incentives for keeping old buildings in place. As industrial buildings age, employment opportunities decline. As residential buildings age, they are used by lower-income groups who are forced to use them at higher population densities. Therefore, aging buildings cause jobs to decline and population to rise. Housing, at the higher population densities, accommodates more low-income urban population than can find jobs. A social trap is created where excess low-cost housing beckons low-income people inward because of the available housing. Unemployed people continue coming to a city until their numbers sufficiently exceed the available jobs that the standard of living declines far enough to stop further inflow. (p. 8)
>
> The availability of housing draws the lowest-income group until they so far exceed the economic opportunities of the area that the low standard of living, the frustration, and the crime rate counterbalance the housing availability. Until the pool of excess housing is reduced, little can be done to improve the economic condition of an inner city. A low-cost housing program alone moves exactly in the wrong direction. It draws more low-income people. It makes the area differentially more attractive to the poor who need jobs and less attractive to those who create jobs. In the new population equilibrium that develops, some characteristics of the social system must counterbalance the additional attractiveness created by the low 10 D-4468-2 cost housing. That counterbalance is a further decline of the economic condition of the area. Unfortunately, as the area becomes more destitute, pressures rise for still more low-cost housing. The consequence is a downward spiral that draws in the low-income population, depresses their economic condition, prevents escape, and reduces hope. All of this is done with the best of intentions. (pp 9-10)

Every investigation of system change is a look across time, of course, so history is a necessary element for understanding systems. Systemic changes to American cities continue, of course. See http://www.theguardian.com/cities/2014/jun/19/-sp-death-of-the-american-shopping-mall.

The unit may be expanded further to become the basis for a "Right Here-Right Now" investigation of conditions and changes in the local municipality. Such an investigation could productively occupy learners for a week, a month, or far more—there's no limit to the possibilities for investigation. Thus, it could become a "civics" course in the original sense of the Latin root—a study of *civitas* (the city and its citizens). Possibilities include:

- Comparing two nearby towns or cities (taxes, services, rates of population change, dysfunction, etc.)
- Preparing photo-essays on city changes
- Studying the effects of local big-box stores (Walmart, Target, etc.)
- Analyzing local employment
- Identifying local problems in services (streets, water, sewer, police protection, etc.)
- Predicting future local change and its consequences.
- Identifying the distribution of rights between city or town vs. residents, related to such things as zoning/land use, standards for property appearance, etc.
- Diagramming and explaining: Water system, sewer system, organization chart, crime locations, etc.

…and much more.

Cities have changed once again since the 1990s. Here's a summary:

> "London, Paris, New York, and Rome—whose political organizations and histories are radically unlike, and which live under regimes with decidedly different attitudes toward the state and toward enterprise—have followed an eerily similar arc during the past twenty-five years. After decades in which cities decline, the arrow turns around. The moneyed classes drive the middle classes from their neighborhoods, and then the middle classes, or their children, drive the working classes from theirs. This has been met in every case by a decline in over-all poverty, but also by a stubborn persistence of pockets of poverty, of extreme exclusion."
>
> Gopnik, Adam: "Street Cred: What Jane Jacobs got so right about our cities, and what she got wrong" *The New Yorker*. September 26, 2016. p. 74

(Forrester quotes added 5/23/2020—HLB)

Return to Marion Brady's website: http://www.marionbrady.com