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Item Type	Working Paper
Authors	Heim, Carol E.
DOI	10.7275/1069113
Download date	2025-01-15 15:47:27
Link to Item	https://hdl.handle.net/20.500.14394/22367

DEPARTMENT OF ECONOMICS

Working Paper

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by

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Working Paper 2006-01
Revised version, August 2008

After further revisions, this paper was published online (Early View) in the *International Journal of Urban and Regional Research* on April 15, 2011. It appeared in print in *International Journal of Urban and Regional Research* 36(4), July 2012, pp. 831-59.

It can be accessed at:

<http://onlinelibrary.wiley.com/doi/10.1111/j.1468-2427.2011.01045.x/pdf>



**UNIVERSITY OF MASSACHUSETTS
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**Border Wars:
Tax Revenues, Annexation, and Urban Growth in Phoenix**

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January 2006
Revised August 9, 2008

Abstract

Phoenix and neighboring municipalities, like many in the South and West, pursued a growth strategy based on annexation in the decades after World War II. This paper explores the link between annexation and competition for tax revenues. After discussing arguments for annexation, it traces the history of annexation in the Phoenix metropolitan area. A long-running series of "border wars" entailed litigation, pre-emptive annexations, and considerable intergovernmental conflict. The paper argues that tax revenues have been a key motivation for annexation, particularly since the 1970s. It then considers several related policy issues and argues that while opportunities for annexation are becoming more limited, competition for tax revenues (particularly sales tax revenues) continues to be fierce and to create dilemmas for municipalities in the region.

JEL classifications: H71, H77, N92, R51

Keywords: annexation, municipal revenues, sales tax, Phoenix, urban growth, intergovernmental relations

INTRODUCTION

Phoenix has been one of the most rapidly growing cities in the United States since 1950. It was the fifth largest U.S. city in terms of population in July 2006, surpassing Philadelphia, which fell to sixth place.¹ The Phoenix metropolitan area ranked thirteenth in 2006, whereas the Philadelphia metropolitan area was fifth. One reason Phoenix's city ranking was higher than its metropolitan ranking was that the city continued to expand its boundaries dramatically by annexation. More of the metropolitan area population was within the city than in a case like Philadelphia. In 2006, the Phoenix city share of the metropolitan area population was about 37 percent, whereas Philadelphia's was only about 25 percent.²

Figure 1 shows the increase in Phoenix's land area from 1881-2005. The city grew from about 17 square miles in 1950 to about 515 by 2005. Other cities and towns in Maricopa County, which includes 24 municipalities, also expanded by annexation (see Table 1 and Figure 2).³ Buckeye grew from under 1 square mile to about 231 by 2005, Peoria from about 1 square mile to about 178. Scottsdale grew rapidly for several decades, although it saw very little annexation in the 1990s and after 2000. As municipalities approached each other's boundaries, there ensued a long-running series of "border wars" or what some called "range wars."⁴

Expansion by annexation was common throughout the United States in the nineteenth century. In the twentieth century it slowed in the East and Midwest, but continued in the South and West, especially after World War II.⁵ This paper explores the link between annexation and competition for tax revenues. After discussing some of the historical literature on annexation and the arguments for annexation made by

contemporaries, the paper traces the history of annexation in the Phoenix metropolitan area from the 1950s onward. It argues that tax revenues have been a key motivation, particularly since the 1970s. The paper then considers several policy issues raised by the annexation history and argues that while opportunities for annexation are becoming more limited, competition for tax revenues (particularly sales tax revenues) continues to be fierce and to create dilemmas for municipalities in the area.

ARGUMENTS FOR ANNEXATION

Scholars have identified a variety of arguments or motivations for annexation. In discussing nineteenth-century annexation, Kenneth Jackson emphasized the municipal booster spirit and the efficiency advantages of a large governmental organization.⁶ He also suggested that a desire to exploit and to control could be at work, with large merchants and businessmen of central business districts exercising a form of urban imperialism in relation to outlying areas and competing cities. Both economic and social control were sought by proponents of annexation and consolidation. Finally, he argued that land speculators supported annexation, although "they usually worked behind the scenes, and their precise role is difficult to measure."⁷ In the twentieth century, cities in the East and Midwest were blocked from further expansion by unfriendly suburbs. Where annexation and consolidation did occur, by cities such as Dallas, Houston, Indianapolis, Oklahoma City, and Jacksonville, Jackson appeared to view this outcome as a response to a need for metropolitan government to achieve efficiency and address problems that were regional in character.⁸

In contrast, Richardson Dilworth's study of metropolitan fragmentation in the

New York region in the late nineteenth and early twentieth centuries emphasized municipal corruption and its relationship to annexation and consolidation. Central city officials operating in a world of corruption and graft could benefit personally from infrastructure development in annexed suburban communities. This created a motivation for annexation. In addition, while some suburban residents resisted annexation by central cities they viewed as having corrupt administrations, others sought annexation to escape corruption in their own local governments. Dilworth also argued that advances in infrastructure technology undermined the efficiency advantages of large metropolitan areas and thus contributed to suburban autonomy. Small communities could remain independent, yet still provide municipal services cheaply and efficiently.⁹

For both Jackson and Dilworth, economic motivations for annexation were part of the story, but their primary focus was on individuals (members of the local business community and landowners, or corrupt city officials) rather than on the municipality as a taxing and spending entity. Other scholars have observed that municipal fiscal considerations could be one of the motivations for annexation. Carl Abbott explained that as population deconcentrated in the post-World War II Sunbelt, annexation enabled municipalities to capture outlying residents and revenue sources.¹⁰ San Jose city officials justified the city's annexations between 1940 and 1970 partially on the grounds that they would capture a tax base for city services.¹¹ William Fulton, discussing the area southeast of Los Angeles, noted that after 1954, "municipal raids upon surrounding county territory became common. In particular, voracious cities coveted the tax-rich industrial area east of Vernon . . ."¹² Ann O'M. Bowman and Michael Pagano described municipal fiscal motivations for annexation in the Phoenix metropolitan area,

highlighting Peoria's expansion in the 1990s as well as earlier annexations by Phoenix and other municipalities.¹³

The legal mechanisms for annexation varied in different states and influenced the ease with which annexation could be undertaken. Jon Teaford pointed out that "whereas Cleveland, Detroit, and Philadelphia could not add rich suburban properties to their tax rolls, permissive annexation laws in Texas allowed Houston to absorb more than one hundred square miles of outlying territory between 1970 and 1987."¹⁴ At the start of the period considered in this paper (1950), Arizona law allowed property owners to petition city councils for annexation if owners of not less than one-half in value of property contiguous to the city signed the petition. It also allowed the legislative body of a city to petition the county superior court to permit annexation of contiguous territory with a resident population of at least twenty-five persons. Not less than a majority of legal voters or the owner or owners of land contiguous to a city also could petition the superior court.¹⁵ In 1954, annexation was made more difficult when the law was amended to specify that personal property, as well as real property, was included in determining whether owners of one-half of the value of property had signed the petition. The 1954 amendment also stipulated that the real and personal property relevant for obtaining signatures was property that would be subject to taxation in the event of annexation by the city, which was consistent with how the law previously had been interpreted.¹⁶

In the Phoenix area the primary argument for annexation, from the perspective of municipal officials, often was to obtain tax revenues and fees. During the decades after 1950, these included sales taxes, property taxes, and other revenues such as population-based shared revenues (e.g., state shared revenues and federal revenue sharing).

Population-based state shared revenues come from the state sales tax, income tax, vehicle license tax, highway user revenue fund, and local transportation assistance fund (funded by the Arizona State Lottery as well as by the vehicle license tax). Some of the revenues from these sources are distributed to municipalities each year on the basis of their populations. From the late 1980s, development impact fees also were collected in annexed (and other) areas.¹⁷

Of course, annexation brought additional costs as well as revenues. The League of Arizona Cities and Towns encouraged municipalities to undertake studies of the effects of annexation before taking action, since "the additional revenue to be gained must be considered in light of the necessary expenditures to provide services to the annexed areas."¹⁸ In some cases, such considerations led to decisions against annexation. Mesa held off on a proposed annexation in 1974 due to concern that financing necessary services in the area would lower the city's income.¹⁹ The city of Phoenix's staff conducted a series of studies on the budgetary impact of annexations. In several cases they concluded that the short-run cost-revenue relationship was negative, but that the longer-run outcome would be more positive.²⁰

Population-based tax revenues motivated municipalities to accomplish annexation before the next census so that residents of the annexed territory would be included in population totals. Gilbert's Acting Town Manager advised the Town Council and Planning and Zoning Commission that "during the calendar year 1979, annexation should be an important issue for the Council, P & Z Commission and the Town staff," since the town's boundaries for the 1980 census would include areas annexed before January 1, 1980.²¹ Buckeye, a town of 5,600, annexed state prison facilities so that the inmates

would be counted in the town's population in the 2000 census. At full capacity the facilities were expected to hold 4,600 inmates, which would bring an additional \$1.3 million in state tax revenues each year. The town planned to use the revenues to upgrade its infrastructure and it agreed to provide police and fire protection and waste removal to the prison facilities.²²

By annexing, cities also sought to avoid being ringed by independent municipalities with their own taxing powers. In *Cities Without Suburbs*, David Rusk (former mayor of Albuquerque) argued that cities must be "elastic" in order to grow. An elastic city "had vacant city land to develop *and* the political and legal tools to annex new land."²³ Phoenix city officials and staff clearly shared this view. "Phoenix has had an aggressive annexation policy, officials explain, to prevent a landlocked core city that eventually would decay and cause residents to move to the suburbs. Instead, [Mayor] Barrow said, 'we annexed the suburbs.'"²⁴ A 1974 staff report had compared Phoenix to cities which did not annex between 1950 and 1970. It concluded that annexation provided an expanding tax base and protected the city against a proliferation of incorporated cities or annexations by other cities.²⁵ In 1978, Councilman Howard Adams was explicit about revenue motivations: "It's incumbent upon us to protect our pocketbook . . . and keep bedroom communities from sapping our financial strength."²⁶ Mayor Margaret Hance, echoing the 1974 report, said annexation policy had been "the single most important factor in the health and vitality of Phoenix."²⁷

In some cases, the goal of annexation was to capture existing sources of revenue, such as the factory outlet mall inside a 12-square-mile area near New River annexed by Phoenix in 1995.²⁸ Often, however, annexation was in anticipation of future

development. For example, in 1987 Gilbert annexed 150 acres at the southeast corner of Gilbert and Williams Field Road; plans for the area included a major shopping center, auto sales mall, office complex, and residential housing.²⁹ Sales tax revenues were especially desired and auto malls topped the list of sought-after developments.

For at least several decades, Phoenix's fiscal structure has been more dependent on sales taxes than U.S. municipalities as a whole. Sales taxes as a share of general revenue from own sources, and as a share of general revenue, are shown in Table 2. The shares in Phoenix have been considerably higher than in all U.S. municipalities since 1969-70. In Scottsdale, sales taxes were reported in 2005 to make up half of the city's operating budget, with sales taxes from auto deals accounting for about 17 percent of those sales taxes.³⁰ More than one-quarter of the municipalities in the Phoenix metropolitan area had no primary or secondary property tax in early 2005.³¹ Most were small municipalities, but they included Mesa, a city of almost one-half million people. (Municipalities in Arizona are not responsible for school finance; that responsibility lies with school districts, which levy their own taxes.)

For municipalities with a property tax, sales tax revenues might nonetheless be a more desired source of revenue than property taxes on residences, since the commercial establishments generating sales tax revenues require less municipal expenditures than residential development. Studies of 128 communities conducted since 1986 showed that for each dollar of tax revenue generated, the median cost of public services for residential development was \$1.19, for commercial and industrial development, \$0.29, and for working and open lands (including farms, forests, and ranches), \$0.36.³² As noted above, in making decisions about annexation, it was important for municipalities to consider not

only the revenue but also the expenditure consequences of those decisions.

A second argument made by municipalities for annexation was that it would allow for orderly, planned growth. Planning staff for the city of Mesa, which was considering annexing 14 square miles in 1978, explained that "city zoning laws are tougher than those of Maricopa County, which administers unincorporated land . . ." ³³ A former Phoenix City Council member claimed that "some of the worst problems the cities have is in areas where (land was) annexed from the counties. Counties have just a hodgepodge of zoning that's inappropriate. In the counties' defense—some of the stuff is very old—they were not equipped to make those kinds of (planning and zoning) decisions." ³⁴ Municipalities also did not want to have to upgrade infrastructure when areas eventually came within their boundaries.

Annexation also may contribute to orderly development by simplifying the political structure of a region. Maricopa County has only 24 municipalities, whereas the Chicago region has 265 and the Los Angeles region approximately 180. Fewer jurisdictions may reduce political fragmentation leading to land-use mismanagement. ³⁵ A 1977 editorial in the *Arizona Republic*, strongly defending annexation in the 1950s and later, claimed that ". . . the entire Valley of the Sun would be a governmental shambles if annexation hadn't been carried out" ³⁶ (although it did not elaborate on the deleterious consequences).

From the perspective of some residents, annexation was desirable because of the municipal services it would bring, and some city officials cited extension of services as one of their motivations. Other residents, however, had moved precisely to avoid living in a city and opposed annexation. Some did not wish to pay city property taxes even

though services would improve.³⁷ Property owners sometimes asked for assurance in advance that a property would be rezoned (e.g., from agricultural to commercial) if they agreed to annexation.³⁸

Property owners are important actors in the urban growth machine coalitions studied by Harvey Molotch and others.³⁹ Molotch also listed other local businessmen, including investors in locally oriented financial institutions, lawyers, syndicators, realtors, publishers or editors of metropolitan newspapers, and others whose futures depend on growth of the metropolis as a whole. These include leaders of public or quasi-public agencies such as universities and utilities. Groups such as urban planners, neighborhood associations, cultural institutions, and organized labor also may participate in growth machine coalitions. Molotch argued that any given locality is an aggregate of competing land-based interests and that a desire for growth motivated politically mobilized local elites toward consensus on growth-related issues.⁴⁰

Annexations were requested by some developers as part of their growth strategies. For example, Continental Homes asked the Phoenix City council to consider annexation of Pima Ranch, where it hoped to create a major residential development. The Council scheduled a policy session in January 1980 to discuss the pros and cons of the case and the financial implications of annexing a larger area, including Pima Ranch, south of the city. Avanti Mortgage Company of Phoenix, which wanted to develop a 33-acre industrial park, requested annexation of 620 acres in 1987 in order to receive Phoenix services. However, other developers opposed annexation of undeveloped areas, preferring to develop under county jurisdiction and have residents request annexation later if they wished. Pulte Homes, for example, opposed annexation by Queen Creek of a

project site in Pinal County in 1998 because the town would require lower-density zoning than the county. If Pulte could get the land rezoned in the county before annexation, the more profitable higher-density zoning would persist even if the town later annexed the land.⁴¹

Thus, while developers sought urban growth along with other members of growth machine coalitions, and extended the urban fringe through the developments they built, they did not always seek annexation. Annexation was desirable to them only when they thought it would increase their economic returns from property development. Those returns depended on local zoning practices, among other factors. This highlights the importance of legislative and regulatory frameworks at the local as well as the state level in influencing where and when annexation occurred. It also shows that some members of a growth machine coalition may seek economic but not political expansion of a municipality.

Another member of growth machine coalitions is the metropolitan newspaper, "a business which has its interest anchored in the aggregate growth of the locality."⁴² Eugene Pulliam, publisher of the *Arizona Republic* and *Phoenix Gazette*, promoted the booster point of view and editorialized in favor of annexation, while taking a conservative stand against communism, labor, and big government and opposing activist politics and the citizen initiative. According to his grandson, Pulliam's concern that Phoenix would be strangled financially by satellite towns taking money and the property tax base outside the city led him to recommend an annexation program to Mayor Jack Williams after his election in 1956.⁴³

Pulliam's newspapers strongly supported charter government candidates, who

won on a reform platform in 1949 and dominated city politics until 1975. "By the time of Gene Pulliam's death in 1975, it [the charter group] was accused of being an undemocratic small group of businessmen running the city for their own financial interests. But in the early years it was the key to the growth of Phoenix, providing an efficient, growth-oriented city administration that could attract industry."⁴⁴ Urban growth and aggressive annexation were central to the vision of charter government proponents, who sought a leading role for Phoenix in the Salt River Valley and in the Southwest.⁴⁵

The Pulliam newspapers also supported major bond issues for parks, water, sewers, streets, libraries, and other city services, even when they required additional taxes. However, in 1973 they became powerful opponents of the proposed Papago Freeway that city leaders considered essential for further growth. Pulliam was concerned about the freeway's social and environmental impacts. He feared that the freeway would divide the city and was concerned about its impact on the natural beauty of the area and the quality of life of Phoenix residents. Allying with environmentalists and McGovern liberals, and breaking with other members of the growth machine coalition, such as the Phoenix Real Estate Board and Chamber of Commerce, his newspapers prevailed in blocking the freeway in the 1973 election. However, when the issue returned in 1975, the freeway was approved despite the strident opposition of the newspapers, whose influence was waning.⁴⁶

Water also influenced annexation decisions. Arizona's 1980 Ground Water Management Act required that new subdivisions in Active Management Areas, where groundwater was being depleted, have a 100-year water supply. This created a reason for

developers to seek annexation of their properties by municipalities, since the properties then would qualify as having an assured water supply.⁴⁷ In the mid-1980s, water also may have been a motivation for municipalities to annex. Legislators in 1985 voiced concerns that cities were "battling for more land so they can qualify for more Central Arizona Project water."⁴⁸ More recently in Peoria, however, availability of water has become a precondition for annexation rather than a motivation. The city is not eager to annex areas that do not bring their own water supply with them, and it requires that development and annexation agreements for large developments include a water budget indicating anticipated demand and supply. In some areas without sufficient groundwater, developers were required to pay for the drilling of new wells at a distance; they eventually would be used to pipe water into the area.⁴⁹

In some U.S. cities, annexation was motivated by a desire to dilute the city's minority vote.⁵⁰ In the Phoenix area, some annexations, especially in later decades, were of territory containing few people; they did not bring a large additional white population into the city. Phoenix also had a smaller nonwhite population than many other annexing cities.⁵¹ However, the issue was raised in Phoenix in 1979, following several annexations that added thousands of voters. Plaintiffs in a suit filed in October claimed that an annexation in May diluted the strength of minority voters. The plaintiffs sought to halt the November 6 primary election on the grounds that the annexation and precinct changes had not been screened by U.S. Department of Justice as required by the Voting Rights Act of 1965. Screening determined whether racial and ethnic voting patterns reflected those of the rest of a city, so that minority voting rights were not weakened. The Justice Department allowed the May annexation to become effective without

objection, although it reserved the right to object later.⁵²

Racial considerations may have worked against annexation of certain areas. Amy Bridges argued that in the 1950s, annexation of poor African-American communities into Phoenix was delayed, whereas newer communities further out were annexed and provided with streets and utilities. The black community in the southernmost part of Phoenix "was annexed just in time for the 1960 census."⁵³ She did not explicitly argue that revenue concerns overcame the earlier reluctance to annex these areas, but as noted above, a larger population at census time meant greater revenues for a municipality.

More typically, however, municipal officials in Phoenix were important agents in promoting annexation, often taking the leading role. Their methods included using city employees and later, paid circulators, to gather petition signatures. They were able to overcome early opposition from the Central Avenue Dairy, which did not want to be subject to the city's health standards and connect to a municipal sewer line, from industrialists such as Oscar Palmer, whose Palmer Manufacturing Corporation objected to Phoenix's building code, and from private water company owners who did not want to be acquired by the city at the prices being offered and who feared municipal competition.⁵⁴

As noted above, opposition to annexation also came from some potential residents, who sought to avoid taxation for city services or to preserve a less urban lifestyle. They were satisfied with services provided by the county and might oppose incorporation as well as annexation by an existing municipality. Sunnyslope residents voted against incorporation four times in the 1940s and 1950s before being annexed in 1959 by Phoenix, which was eager to prevent the formation of a satellite town. In the

1980s and 1990s, annexation also was opposed by city council members who objected that annexations were expensive, delayed service provision for areas already in the city, and discouraged infill.⁵⁵ Similar views were expressed in 2003 by city council candidate Tom Simplot, who called for a moratorium on major annexations.

Simplot was described, however, as "one of only a handful of voices, including Linda Nadolski in the mid-90s, who have called for curbs on large-scale growth while running for office in a city that annexes so aggressively."⁵⁶ Pro-growth sentiments were dominant in Phoenix throughout the second half of the twentieth century. Although there was some popular opposition, the opponents were not as well organized as city policy makers, and Phoenix does not appear to have experienced the same level of resistance to annexation across a broad political spectrum that was found in other cities, such as Tucson and Albuquerque. There, according to Michael Logan, ethnic and environmental considerations were important motivations along with individualistic and anti-government attitudes of the type also seen in Phoenix. Phoenix did face considerable opposition from other municipalities that also were pursuing annexation, and from some successful incorporations, as discussed below.⁵⁷

ANNEXATION IN THE VALLEY OF THE SUN

1950s: Tax Exemptions for Industrialists

Significant annexation in the Phoenix area dates from the late 1950s. The municipal reforms of 1948-1950 established charter government, with a strong city manager and better municipal administration. Potential Phoenix residents had more confidence that, if annexed, they would live in a well-managed city. Previously, many

fringe area property owners who thought municipal government was inefficient and unprofessional had refused to sign annexation petitions. Annexation initially proceeded slowly, due in part to lack of city staff and to legal and political challenges by annexation opponents. Major cities sought changes in state laws to make annexation easier, but legislation governing the annexation process actually became more restrictive in the mid-1950s.⁵⁸ However, based on his study of Phoenix during 1944-1973, William Collins concluded that "in the end the annexation law, while not simple, proved liberal enough to allow the city to acquire nearly all the land that it sought."⁵⁹

The role of revenue motivations in early annexation efforts is not entirely clear. Phoenix City Manager Ray W. Wilson denied in 1951 that the need for more tax revenues was a reason for city expansion and thought that "annexed areas receive more in services for several years than they contribute in taxes."⁶⁰ The argument for annexation made by the *Arizona Republic* in 1957 was that "Phoenix is a metropolitan area. Industries in this area can choose between a handful of small, autonomous cities, with duplicating services and inefficient operation, or one large municipality of the type now enjoyed by Phoenix. We'll choose the latter, and we think most people will agree."⁶¹ In 1958, to ensure successful annexation, the city was willing to forego sales tax revenues, as well as to amend its building code and zoning ordinance and to assure property owners that property tax rates would remain stable. Industrialists in southeastern and southwestern areas opposed annexation and argued that they needed tax exemptions to compete effectively while being inside the city. On March 24, 1959, voters approved 14 exemptions to the city sales tax for business and industry and the annexations proceeded.⁶²

However, John Williams, the city's finance director, argued that increased property tax revenues from the highly valued industries would offset the lost sales tax revenues.⁶³ According to John Wenum, who studied annexation by Phoenix and neighboring municipalities, "despite their disavowal of tax-base expansion as a goal of annexation, nine [of forty-one public and private] respondents indicated that this might have been a consideration in the annexation of a large industrial tract in 1959."⁶⁴ An *Arizona Republic* editorial in 1975 stated that "the industries have paid far more in property taxes than they have saved through the sales tax 'concessions' . . . the voters approved the small price paid for annexation in return for the much larger benefits that would stem from having these firms in the city."⁶⁵

1960s: Contested Borders

By the end of the 1950s, cities were approaching each others' boundaries (see Figure 3) and considerable acrimony ensued. The most heated conflict, which began in 1956, was between Phoenix and Scottsdale. The two cities ended up in protracted court battles after attempting to annex the same land.⁶⁶ The *Arizona Republic* reported in March 1963 that the "recurring annexation war between Phoenix and Scottsdale erupted anew yesterday" and noted a few days later that "in this vast space, two booming Valley cities are competing for the right to expand to make way for future growth."⁶⁷ Scottsdale accused Phoenix of "trying to hem us in from the north."⁶⁸ Scottsdale's original incorporation in 1951 was motivated by its fear of being swallowed up by Phoenix. Tempe and Glendale also reacted to Phoenix's expansion by attempting to annex, sometimes unsuccessfully. Relations between Phoenix and Glendale were not as bitter as those among the other cities, for several reasons including the fact that some residents on

Glendale's fringe actually preferred to be annexed into Phoenix.⁶⁹

Some efforts were made to halt the border wars, although they did not always have lasting success. Phoenix and Glendale created a "neutral area" in 1958 and later extended the arrangement to other areas. Phoenix and Scottsdale agreed on "spheres of annexation influence" in 1964. In 1968, Chandler and Tempe passed a "gentlemen's agreement" setting out which areas could be annexed by each city in the future without prior approval of the other city and establishing an open area between them which was to be jointly planned.⁷⁰ The agreement was reaffirmed in 1971 but violated by Chandler in 1974, setting off the annexations by Gilbert and other cities described below.⁷¹

Similar attempts were made in later years. In 1978, Phoenix and Scottsdale agreed not to annex land across their respective sides of Scottsdale Road, and in 1985 the two cities agreed upon the 56th Street alignment as a future boundary. In order to gain Phoenix's assent to incorporation, Cave Creek agreed in 1986 not to extend its boundaries south of the Carefree Highway. But it later reneged on that agreement, claiming it was a "blackmail agreement."⁷² In 1987, Chandler entered an agreement with Gilbert to draw a boundary line dividing 16 square miles of unclaimed land between the two communities; the hope was that the agreement would prevent future "land grabs" and contribute to more systematic planning.⁷³ As growth spread beyond Maricopa County to Pinal County (between Phoenix and Tucson), the municipalities of Casa Grande, Coolidge, Florence, Maricopa, and Eloy worked on official intergovernmental agreements to replace gentlemen's agreements made in the 1980s but ignored by new city and town managers.⁷⁴

1970s: Pre-emptive Strip Annexation

In their annexations, municipalities could not "jump over" land that had been annexed by another city, even if that land was simply a narrow strip of property intended to serve as a barrier to another municipality's expansion. The area inside the strip remained county land (referred to as a "county island") until the strip-annexing municipality chose to annex it. A 1974 annexation by Chandler spurred Gilbert in 1975 to create the largest county island to date with a strip varying in width up to 200 feet that enclosed a 51 square mile area (see Figure 4).⁷⁵ Gilbert was seeking to prevent similar action by Mesa or Chandler. In 1978 Gilbert was a town of 4,100 that was anticipated to grow to 125,000. Gilbert Mayor Dale Hallock explained that "by doing the stripping we've taken in everything that could ever be in Gilbert and now we are in a position to very slowly go ahead and develop it."⁷⁶ In a 1976 interview, Town Manager Lynn Stuart also emphasized planning considerations and citizens' desire that Gilbert keep its rural atmosphere.⁷⁷

County islands created headaches for county officials in law enforcement, road maintenance, and construction, who claimed that municipalities only annexed parts that benefited them, leaving behind pockets that needed extensive road work or bridges. In the Gilbert case, the county Board of Supervisors was reluctant to continue developing highways inside the island, but ultimately it did.⁷⁸ Maricopa County Manager Robert Mauney argued that

Cities and towns look at annexation as a business venture, and the profit motive is always there. They want the tax base, but they don't want to have to put a lot of money into improvements. That's why many of them wait until roads and other improvements are completed before they consider annexation.⁷⁹

County islands continued to pose problems and the League of Arizona Cities and Towns pressed for legislation making it easier to eliminate them. A bill (not introduced by the League) that was signed into law in 2003 allowed counties to initiate annexation of parcels of 10 acres or less, though the process would be halted if more than half of the property owners, or cities and towns, objected.⁸⁰ Some municipalities decided to cut off emergency and fire protection services to residents of nearby county islands who were not paying taxes to the municipalities and had contracted instead for services with a more distant private supplier (Rural/Metro). Not surprisingly, such decisions were controversial, as when Goodyear refused to respond to a near-drowning call just outside the city. Ultimately services were resumed by Goodyear and Avondale, who planned to charge Rural/Metro a steep price for providing them.⁸¹

The 1975 Gilbert strip annexation was challenged in court. The annexation law required consent of the owners of at least 51 percent of the assessed valuation of the area to be annexed. The suit claimed that Gilbert annexed all of the property of those favoring annexation, but only part of the property of those opposing it. The rest of their property was not included in the calculations to determine whether 51 percent was attained. The *Arizona Republic* reported that "Lawyers for the town concede it used that method in its annexation, but say the action was legal."⁸² The annexation was upheld, but the case helped to generate changes in the legislation discussed below. A ruling by the Arizona Court of Appeals in a later case noted that "*Glick* indicated that some cities were engaging in "strip" annexation, that is, were artificially extending their boundaries to include potentially high value taxable areas, or to defend against the encroachment of equally aggressive neighboring municipalities."⁸³

One neighboring East Valley community—Mesa—was reported to have been relatively unconcerned by Gilbert's 1975 annexation.⁸⁴ However, Mesa pursued its own aggressive annexation plans and municipalities to the west of Phoenix, including Tolleson, Avondale, Goodyear, and Peoria, all joined in border wars in 1976-77. Like Buckeye in more recent years, the first three were tiny communities (populations under 7,000 in 1970) that added vast amounts of land. In June 1976, Phoenix strip annexed around an area of about 37 square miles "in response to the threat that Tolleson would annex an area that Phoenix officials feel is in the path of natural Phoenix expansion."⁸⁵ It added another 5 square miles in July "so Avondale wouldn't annex the world," according to Councilman Ken O'Dell.⁸⁶ In July 1977, Phoenix annexed a 25-foot-wide strip around a 14-square-mile area in Deer Valley. An editorial in the *Arizona Republic* asserted that Phoenix was "again maintaining its right to grow" in the face of possible incorporation of a city of Deer Valley or possible strip annexation of the area by Peoria.⁸⁷

Stealth was involved in some cases. In May 1976, "Goodyear annexed a parcel of land a few hours ahead of its neighbor city [Avondale]," sparking a dispute.⁸⁸ A few years later the *Arizona Republic* reported that "the southern boundary of Phoenix was locked into place permanently Thursday when the City Council called a special annexation meeting on short notice to head off a rumored intrusion by Chandler into the Ahwatukee area."⁸⁹ Chandler had been scheduled to consider an annexation that Thursday night.

1980s: Changes in Annexation Legislation

The 1980s brought two important changes in annexation legislation. Strip annexation was outlawed in 1980. "A city or town shall not annex territory if as a result

of such annexation unincorporated territory is completely surrounded by the annexing city or town."⁹⁰ Territory annexed had to adjoin the annexing municipality for at least three hundred feet and had to be at least two hundred feet in width, exclusive of highways, and no more than twice as long as it was wide.⁹¹ In 1986, other changes made annexation more difficult. A waiting period of thirty days before signatures could be collected on annexation petitions was imposed. During that time a public hearing had to be held after notices had been published, posted, and mailed to relevant parties. The petition had to be "signed by the owners of one-half or more in value of the real and personal property and more than one-half of the persons owning real and personal property that would be subject to taxation by the city or town in the event of annexation."⁹² Previously, annexations could be done with the signatures of a very few large property owners whose property was worth more than one-half of the assessed value in the area to be annexed. In one extreme case in 1977, the 14-square-mile Deer Valley annexation, Phoenix annexed the entire area with the signature of a single property owner.⁹³

Some cities rushed to annex before the 1980 legislation took effect. Scottsdale's City Council met at 7 a.m. on June 30, 1980 to approve an annexation by which a 10-foot-wide strip enclosed 86 square miles, an area nearly equal to the city's size. The action was challenged by several lawsuits alleging violations of the state's open meeting law. In July, Chandler prepared plans to surround 36 square miles with a similar strip."⁹⁴ Despite the outlawing of strip annexation, annexation wars continued in the early 1980s. Conflicts among Phoenix, Scottsdale, Cave Creek, and Peoria were an important impetus for the 1986 legislation.⁹⁵ As an initial step in 1985, a one-year moratorium on city

annexation involving state land was approved. Legislators wanted a year to study possible legislative changes; they feared annexations of outlying areas would encourage leap-frog development, discourage in-fill, and drain a city's water resources.⁹⁶ In addition to making the changes described above, the 1986 legislation allowed deannexation of territory to cure some of the problems created by past strip annexation. However, because the deannexation law only applied to a select group of Arizona cities and towns, it was declared unconstitutional in 1990 by the Arizona Supreme Court.⁹⁷

After the passage of the 1986 legislation, and in response to Phoenix City Council discussions on the merits of annexation, a multi-departmental task force produced an annexation policy study analyzing the issues. City Council member Linda Nadolski had been vocal in opposing further annexation, which she argued had negative fiscal consequences for existing city neighborhoods. Others had suggested that the city should promote growth within its existing boundaries and thought that annexation encouraged urban sprawl. The annexation policy study reaffirmed the conclusion of the 1974 staff report that annexation had positive long-term benefits. It did, however, recommend careful determination of which areas should be annexed and of the optimum timing for annexation. Evaluation criteria were proposed to be used by staff in reviewing each proposed annexation area. Phoenix planning officials remained committed to a policy of expansion, although the Planning Department did reject a few annexations that did not seem appropriate at the time they were proposed. Both revenue and planning considerations remained important for city officials.⁹⁸

1990s: West Valley Growth

Although the tightening of the legislation made it more difficult, annexation continued in the 1980s and 1990s (see Table 1 and Figure 5). Much of the annexation of the 1990s and after 2000 occurred in the West Valley, with Buckeye and Peoria registering especially large increases in land area. For some time Peoria and Phoenix had been jockeying for position in the northwestern area near Lake Pleasant. A compromise plan recommended by the State Land Commissioner in 1987 identified areas for future annexation by each city and left about 40 percent of the contested area outside both. Annexations within these areas proceeded in later years.⁹⁹

Buckeye's expansion was especially dramatic. It followed in the footsteps of Surprise, another small West Valley municipality that had annexed a large amount of territory in the 1980s to position itself for future development. In 1999, Buckeye annexed the site that would become the Verrado development created by DMB Associates. With an annual town budget of \$2.6 million, Buckeye hoped to see Verrado bring annual property-tax revenue of \$10 million. An even larger annexation of 35,000 acres in 2002 had been requested by the developers of Douglas Ranch, a master-planned community that eventually could include 83,000 homes over the next half-century. John DiTullio, the developer's representative, and Buckeye's Mayor Dusty Hull argued that the annexation would bring control of water resources essential for the town's future growth. With Douglas Ranch added to other large-scale developments already approved by the Buckeye Town Council, over 240,000 new housing units were projected for a town whose population at the time was approximately 7,000. As a result of its ambitious

annexations, Buckeye became second in area only to Phoenix among Valley municipalities.¹⁰⁰

An overall shift in the focus of growth from the East Valley to the West Valley occurred in the 1990s and after, partly due to development of highways west of Phoenix and to availability of land. In 1991, about 26 percent of Valley housing starts occurred in the west; by 1999 its share was 40 percent, more than the northeast or southeast.

Population continued to soar in many East Valley municipalities as well, but the West Valley attained a new presence in the region. Its municipalities competed hard for facilities. Glendale was successful in two major cases. It landed the new Coyotes hockey arena after negotiations for a Scottsdale site at Los Arcos failed, and it won out over Tempe and Mesa after a nearly two-year battle to attract the Cardinals football stadium, which opened in 2006. Glendale offered an attractive site to be purchased by the Cardinals and the creation of a Community Facilities District, which would issue bonds for \$48 million of on- and off-site improvements and retire the bonds through a combination of parking fees, surcharges, and sales taxes at the site.¹⁰¹

Glendale also reversed its annexation policy in 2005 as projected improvements in the Loop 303 freeway led city officials to anticipate increases in land values and development along the freeway route. This area lay within the territory strip-annexed by Glendale in the 1970s. The city had not been eager to annex the unincorporated territory and had considered annexations only if property owners approached the city and were east of 115th Avenue. However, with the prospect of sales, construction, and property taxes from new properties included within the city, Glendale began actively courting property owners for annexations.¹⁰²

2000-: State Trust Lands

Further opportunities for annexation are becoming more limited. Much of the remaining undeveloped land around Phoenix is owned by the state or federal government or by Native American tribal communities. State trust lands are available for annexation and pose some interesting issues. At the time of Arizona's State Enabling Act in 1910, which allowed the Territory of Arizona to prepare for statehood, sections of each township were assigned to be held in trust for funding public schools. This was a common practice but unlike many states, Arizona retained ownership of much of its trust land rather than selling it quickly. The trust has a fiduciary responsibility to manage its assets in the interests of its beneficiaries and the Arizona Enabling Act and Arizona Constitution specify that the trust lands cannot be sold or leased except to the highest and best bidder at a public auction. These requirements put constraints on what the Arizona State Land Department can do with the land and create difficulties for environmental groups and municipalities that want to see open space preserved rather than developed. At auctions during 2004, state trust lands sold at prices well above their appraised values, sometimes double or more the initial value.¹⁰³ Appraisals subsequently were raised to higher levels, then were lowered as the housing market cooled after peaking in 2005.

Border wars can occur over state trust land as well as privately owned land, with more than one municipality hoping to annex the same piece of land. The State Land Department declined to take sides in the dispute between Phoenix and Peoria over land near Lake Pleasant. Instead, it required that the two cities work out their boundary dispute before the State Selection Board approved their annexation requests in December 2002. Phoenix had sought to annex west to 79th Avenue; Peoria had included the area

east to 67th Avenue in its General Plan and objected to Phoenix's annexation request. The boundary ultimately ended up following the 75th Avenue alignment north of New River Road.¹⁰⁴

A large area of state trust land to the south and east of Phoenix, in Pinal County, is available for annexation and is being viewed as an opportunity for more coordinated regional planning than previously typical in the Phoenix metropolitan area. This area, known as Superstition Vistas, includes 275 square miles and ultimately may have a population of 900,000. Similar hopes for regional cooperation have been voiced for the Williams Gateway area, located on a county island east of Mesa and the Phoenix-Mesa Gateway Airport, but within Mesa's municipal planning area. The Arizona State Land Department owns land adjacent to a proposed mixed-use development there and hopes to increase the land's value by working with the developer (Scottsdale-based DMB) to plan and rezone a large area. DMB petitioned the Mesa City Council in 2008 to annex its 5 square miles and proposals to annex adjacent state trust lands are likely to follow. Future disposition of state trust lands throughout Arizona may be affected by state trust land reform efforts, although attempts in 2006 and previous years to pass ballot initiatives and state legislation were unsuccessful.¹⁰⁵

POLICY ISSUES

In addition to helping explain how Phoenix grew to its current size and urban form, the history of annexation raises some interesting policy issues. Some are distributional issues captured by basic questions of political economy: who pays, who benefits, and who decides? In Phoenix, city council members and others questioned the

policy of extensive growth and asked whether central city residents should bear costs of providing infrastructure to benefit newly annexed areas at the fringe. They believed that annexation had negative fiscal consequences for existing city neighborhoods.

Unfortunately, it is difficult to assess accurately the distributional consequences of annexation within municipalities and to determine the extent to which older neighborhoods subsidized newer ones. Municipal budgets do not identify a distinct geographical location for all expenditures and revenues, and facilities or services may cover several neighborhoods.

Beginning in the 1980s, development impact fees whose goal was "requiring growth to pay for itself" were adopted by Phoenix and other municipalities (and counties). These are fees assessed on new developments to pay for the additional public facilities needed for them, such as water and wastewater treatment plants, parks, libraries, fire and police stations, roads, and others. Although impact fees are an important source of funds, they remain only a partial solution to the problem of infrastructure finance in the Phoenix metropolitan area. They do not cover the entire infrastructure costs of new development. Due to the length of time it takes to do impact fee studies and get new fees approved, and to rising construction costs, they may yield insufficient funds for the costs they do cover. They are complicated to assess and implement fairly, and do not fully solve the infrastructure finance "gap" problem faced by growing communities, since the fees are assessed on dwelling units and commercial space, but some public infrastructure needs to be built first.¹⁰⁶

Three additional policy issues can be raised. First, did the bitter history of annexation wars make it more difficult for municipalities to cooperate on matters of

regional concern, such as transportation or environmental issues? While some planners and others think it may have played a role, it was difficult to find examples of specific policy decisions that were blocked or made poorly that could be attributed to this cause. There may have been some examples in the area of transportation, such as streets from Phoenix that were not aligned to make it easy for Phoenix shoppers to get to Scottsdale, or delays in their construction.¹⁰⁷ On the other hand, municipalities did succeed in coming to agreement on a major transit plan associated with a November 2004 referendum to extend a half-cent sales tax due to expire after its initial 20 years. Ongoing difficulties in reaching cooperation among municipalities may be due not primarily to historical memories of annexation wars, but to current situations that appear to participants to be zero-sum games.

A second policy issue emerges when annexation and the associated land-based growth path are no longer an option. What happens when a city runs out of land? What changes in policy become necessary when a city no longer can count on tax revenues from extensive growth? One possibility is more intensive development. The idea of promoting areas of intense development (urban villages) within a metropolitan area of low-density urban form arose in Phoenix in the 1970s. Part of the motivation was a desire by city government to participate more actively in planning of locations for regional shopping malls, because they were important sources of sales tax revenues.¹⁰⁸

In 1979, the Phoenix City Council adopted an urban village model of growth. It sought to create self-contained urban sub-areas (initially, nine villages) that would include housing, jobs, stores, and recreational and educational facilities and would be identifiable communities within the larger city. However, the plan proved difficult to

implement and years later, many residents did not even know the name of their village. Studies of three of the villages showed that their travel patterns did not conform to the urban village concept. Grady Gammage, Jr., a leading real estate attorney and keen observer of Phoenix growth patterns, has described the city's persistent ambivalence toward more dense development and tall buildings. Ironically, some village planning committees became powerful opponents of developments that would increase building heights in their neighborhoods.¹⁰⁹

The need to consider intensive development became more urgent as some communities approached build-out. Scottsdale found itself in that situation, partly due to its commitment in the 1990s to preservation of desert open space. By 2003, Scottsdale had only about 4,000 acres of developable land left of its 117,000 acres and new-home prices were soaring. The Morrison Institute for Public Policy issued a report arguing that Scottsdale needed to focus on intensive development and redevelopment and to become involved in three regional efforts: genome research, initiatives associated with Arizona State University, and a (related) push to top-tier science and technology status. The city decided to put \$130 million into redevelopment of the Los Arcos Mall into the ASU Scottsdale Center for New Technology and Innovation. High-rise developments were accepted downtown as part of the more intensive strategy. However, ambivalence about building heights continued and became a major issue in the 2008 City Council election.¹¹⁰

Chandler took a forward-looking approach. Anticipating that vacant land would be nearly gone by 2010, it commissioned in 2003 an initial study of build-out, and in 2004 a more extensive one. One of the city's goals was to avoid serious strain on the

municipal budget as revenues from new home construction declined. Retail and employment growth were expected to lag behind residential growth, but services still would need to be provided to residents. The report's recommendations included attention to infill development and acceptance of higher densities and mixed use in selected locations. Chandler also adopted a Mid-Rise Development Policy, with the proviso that "where proposed, mid-rise development should be consistent with the lower profile, less intensive development pattern that characterizes Chandler today."¹¹¹

Tempe was landlocked early on (see Table 1). It successfully redeveloped (or gentrified) its downtown during the 1980s.¹¹² However, one tool that appears to have been important—the exercise of eminent domain—may be less available to Scottsdale or other municipalities. Eminent domain has never been popular in Arizona, a strong property-rights state. Recent controversial cases inflamed opposition. When Mesa tried to exercise eminent domain for redevelopment in the case of Bailey Brake Service, many viewed the action as a taking for private developers rather than serving a genuine public purpose. The courts ultimately blocked the action and the state legislature made the exercise of eminent domain more difficult by requiring a two-thirds Council vote and more public reviews and process. Further revisions to the eminent domain law were passed in 2006 as part of Proposition 207, which also included sweeping provisions requiring government to compensate property owners if land-use regulations reduced the value of their property.¹¹³

Phoenix probably will not face dilemmas associated with build-out for several decades, especially with its recent annexations in the north, but there has been concern about strengthening the city's downtown and about the impact of ongoing expansion at

the periphery upon the city's core. Phoenix established a Downtown Development Office in July 2004 and a major redevelopment plan including a downtown campus for Arizona State University, bioscience centers, light rail, and high-density housing, was adopted by the City Council in December. At the same time, Phoenix appeared to be seeking to keep its options open for extensive growth. When Cave Creek sought to annex 11 square miles, pushing its western border to 24th Street, Phoenix objected to the State Land Department. Cave Creek Mayor Victor Francia was reported to believe that Phoenix's action was a payback for Cave Creek's betrayal of its 1986 promise not to extend south of Carefree Highway. Whether or not that was the case, the annexation by Cave Creek would make it more difficult for Phoenix to annex Anthem and New River in the future. It was unclear whether Phoenix eventually would seek to annex these areas as part of further northern expansion, although Rick Naimark, executive assistant to the Phoenix city manager, denied that there were any plans to do so. Cave Creek persisted and in 2008 was pursuing an agreement with the Arizona State Land Department that would entail annexation of 8.8 square miles, with much of the land rezoned for open space conservation, and more intense commercial development on some parcels from which the State Land Department would receive revenue.¹¹⁴

Finally, even as the annexation wars wound down, competition for tax revenues remained intense. When David Richert became Phoenix Planning Director in 1992, City Manager Frank Fairbanks gave him a directive to stop the bleeding of sales tax at the city's borders (i.e., the loss of revenues to neighboring municipalities).¹¹⁵ Within municipalities, the push for sales tax revenues may have led to inferior planning and zoning decisions. Debra Stark, Peoria's Community Development Director in 2004,

described the possibility of properties being zoned for commercial use but then being unable to attract commercial development, sitting vacant, and eventually having to be down-zoned.¹¹⁶ Or, too many retail facilities may be built, they struggle to survive, and cities end up with empty buildings if they fail.

In the Phoenix area as elsewhere, municipalities compete by offering tax incentives and other subsidies to developers to locate retail development, such as shopping centers or auto malls, within their boundaries. It certainly would seem to be in municipalities' interest, especially at a time of tight budgets, to avoid paying large subsidies for developments that would locate somewhere in the region in any case.¹¹⁷ The dilemma, of course, is that they risk losing the development to another municipality willing to pay, and many municipal officials feel that if the subsidies succeed, they are worth the price. Citizens do not always agree; Scottsdale ultimately decided through a voter referendum not to provide a \$36.7 million subsidy, approved by the City Council, to Wal-Mart to locate at the site of the former Los Arcos Mall in south Scottsdale.¹¹⁸

Joint revenue sharing agreements, in which municipalities agree to share the sales tax revenues generated by a mall regardless of where it locates, can eliminate this dilemma. Phoenix and Scottsdale tried unsuccessfully in the 1990s to create a joint revenue sharing agreement for development along North Scottsdale Road, which divides the two cities and which at its intersection with the Loop 101 freeway is one of the last remaining areas for development. Part of the problem is that whichever municipality feels it is winning the competition has less incentive to make an agreement; over the years the balance shifted between Scottsdale and Phoenix. Scottsdale snared Nordstrom for the Scottsdale Fashion Square Mall with a subsidy of \$27.5 million in the early 1990s.

But Phoenix later landed major commercial development along the west side of Scottsdale Road, including a \$100 million luxury auto mall that opened in 2002 and popular new shopping areas such as Desert Ridge Marketplace and Kierland Commons.¹¹⁹

There have been two successful cases of revenue sharing agreements between Tempe and Chandler. The first (1996) was for the Arizona Mills Mall, which ultimately landed in Tempe.¹²⁰ Guadalupe also was part of this arrangement. The agreement was terminated in 2003 on the grounds that "there has been substantial commercial development within Chandler and the perpetual sharing agreement is no longer necessary."¹²¹ Tempe and Chandler also worked out an agreement in 1998 over a Chapman Chevrolet dealership that ended up in Chandler. They agreed not to provide tax rebates; the host city was to receive the first \$4 million in tax revenues and 75 percent thereafter.¹²²

Much more typical, however, were large incentives, such as the \$60 million offered by Gilbert and estimated \$40 million by neighboring Chandler to lure auto malls. An agreement was announced in 2004 but it involved both malls being built without sharing revenue.¹²³ Recent examples of incentives for mixed-use developments included nearly \$100 million from Phoenix for CityNorth, \$240 million from Surprise for Prasada, and \$20 million from Mesa for the Waveyard water sports resort.

Some Arizona legislators have not been pleased with municipal competition for tax revenues. In 2005, they passed legislation to limit retail sales-tax incentive agreements. Senate Bill 1274, sponsored by Senator Jay Tibshraeny and others, was intended to provide more transparency and accountability concerning agreements, rather

than to stop them. Municipalities were required to make findings, verified by an independent third party, that the incentive would raise more revenue than the amount of the incentive (though a full fiscal impact analysis was not required), and that the retail business or a similar retail business would not locate in the municipality in the same time, place, or manner without the incentive.¹²⁴

Not all legislators felt this bill was sufficient. They wanted to end "outlandish deals"; their goal was to "force the cities to stop giving public subsidies to big-box retail stores and auto malls."¹²⁵ Senator Ken Chevront and others sponsored legislation imposing financial penalties. Municipalities would lose state-shared tax revenues in an amount equal to the incentive. Senator Chevront (himself a small business owner) argued that legislation was needed because small business could not compete with "big boxes" that were given incentives. He felt that market forces should be allowed to operate and that business survival should not depend on government intervention.

The legislation failed to pass in 2005 and 2006, but a similar bill (House Bill 2515) was signed by Governor Janet Napolitano on July 2, 2007. The penalties apply to cities and towns with exterior boundaries located entirely within the exterior boundary of a metropolitan statistical area (MSA) with a population of more than two million that provide tax incentives to retail businesses. The Phoenix-Mesa-Scottsdale metropolitan area (Maricopa and Pinal Counties) is the only Arizona MSA with a population of that size. An amendment to make the legislation apply statewide was defeated. An unintended loophole exempted Peoria from the penalties, and the Governor asked the legislature to close the loophole at its earliest opportunity.¹²⁶

Some municipalities opposed this legislation, as did the League of Arizona Cities and Towns. The main arguments were that it would limit municipal autonomy and jeopardize Arizona's business-friendly reputation. Their position was that decisions about incentives should be made at the local level. Smaller, rapidly growing municipalities such as Avondale, Surprise, and Florence also argued that they should be able to use incentives in the same way that other municipalities had done earlier, to create a solid basis of retail sales-tax revenue by attracting retail establishments.

In hopes of forestalling the 2005 legislation, the mayors of six municipalities (Avondale, Chandler, Peoria, Phoenix, Scottsdale, and Tempe) announced in January that year that they were working together on agreements to stop sales-tax incentive wars. Chandler, Phoenix, and Tempe did ultimately agree to a truce creating a "no-incentive zone," but only in a small area along a portion of the cities' mutual borders. In a 2007 study, the Morrison Institute called for a more far-reaching "sales tax treaty" among Pinal County and all of its cities and towns. The treaty would include a moratorium on all incentives favoring one location in Pinal over another. A portion of the sales-tax revenues received from car dealers, big box stores, and regional malls would be pooled and divided using a formula based partly on population and partly on where the taxes were generated.¹²⁷ As one positive example of action toward cooperative agreements, Mesa, Apache Junction, and Queen Creek were working in 2008 on a revenue-sharing pact for a 10.5 square mile parcel in Superstition Vistas, "to prevent municipal wars over landing major sales tax generators like auto malls."¹²⁸

CONCLUSION

The history of urban growth in the Phoenix metropolitan area has been one of expansion onto inexpensive land from which tax revenues could be reaped as new areas were annexed into municipalities. These fiscal considerations were an important motivation for annexation, particularly from the 1970s onward, although other factors such as a desire for planning control and sheer boosterism should not be overlooked. The resulting border wars entailed court battles, pre-emptive land grabs, and mistrust between municipalities. They ultimately helped to provoke state legislation in the 1980s that outlawed strip annexation and made annexation more difficult. Annexation continued, however, both by municipalities such as Phoenix, which already had grown large but continued to see physical expansion as crucial to ongoing prosperity, and by tiny communities in the West Valley such as Buckeye, which sought to replicate the experience of Phoenix in earlier decades.

By the turn of the century, limits to annexation and to extensive growth were being approached by several communities, but competition for tax revenues continued unabated. As some municipalities considered more intensive development strategies, inducements to developers to locate within their boundaries often were an important part of the package. The distributional consequences of those inducements led to opposition both from citizen's groups and from state legislators concerned about the transfer of funds from municipalities to private firms. Where extensive growth continued, in more distant areas such as Pinal County, some municipalities hoped to craft intergovernmental agreements that might help to prevent repetition of the earlier history of border wars in Maricopa County.

NOTES

This paper is part of a larger project comparing urban growth and property development in Chicago from about 1850-1900 and Phoenix from about 1950-2000. I would like to thank the Political Economy Research Institute at the University of Massachusetts, Amherst, for research support. I am grateful to Philip Carter, Nancy Folbre, Thomas Maloney, Lynne Sagalyn, Eric Sandweiss, Anita Summers, and anonymous referees, for helpful comments on earlier drafts of this paper. I also benefited from discussions of this research at sessions at the annual meetings of the Organization of American Historians and the Social Science History Association, at the Penn Economic History Forum at the University of Pennsylvania, and at presentations sponsored by the Center for Public Administration and Policy and the Economics Department at the University of Arizona and by the Center for Public Policy and Administration at the University of Massachusetts, Amherst. In addition to those cited in the notes below, I would like to thank the following individuals for useful discussions and information that contributed to my research for this paper: Douglas Ballard (Chandler Planning and Development Department), Dalen Buchanen (Maricopa Planning and Development Department), Robert Cafarella (Scottsdale Preservation Department), Catherine Connolly (League of Arizona Cities and Towns), Corey Cox (Arizona Department of Commerce), Patrick Flynn (Flynn Financial Consulting), Patricia Gober (Department of Geography, Arizona State University), Ruth Gieszl (Gilbert, Arizona), Matthew Holm (Maricopa Planning and Development Department), Teresa Huish (Scottsdale Planning and Development Services Department), Kathleen Ingley (*Arizona Republic*), Gregory Keller (Arizona State Land Department), Jeff Kulaga (Scottsdale Mayor's Office), Joseph Nucci (Tempe Development Services Department), Dan Stanton (Arizona State University Libraries), and Philip VanderMeer (Department of History, Arizona State University). The affiliations listed above and in the endnotes are the ones that individuals held at the time I spoke or corresponded with them; some subsequently have changed. Newspaper articles cited below came from several sources, including original hard copies of newspapers; microfilm copies; collections of clippings in local archives; the online edition of the *Arizona Republic*; *CD News: The Arizona Republic, Arizona Business Gazette* on CD-ROM; and the electronic edition of the *Arizona Republic* in NewsBank, Inc.'s database. Some of these sources do not provide page numbers for articles.

¹ U.S. Census Bureau, "Table 1: Annual Estimates of the Population for Incorporated Places Over 100,000, Ranked by July 1, 2006 Population: April 1, 2000 to July 1, 2006," <http://www.census.gov/popest/cities/tables/SUB-EST2006-01.xls>.

² U.S. Census Bureau, "Table 5. Estimates of Population Change for Metropolitan Statistical Areas and Rankings: July 1, 2005 to July 1, 2006," http://www.census.gov/population/www/estimates/metro_general/2006/CBSA-EST2006-05.xls.

³ The Phoenix metropolitan area included only Maricopa County until after the 1990 census, when Pinal County was added. The population of Maricopa County was

3,768,123 at July 1, 2006; at that date the population of Pinal County was 271,059. See U.S. Census Bureau, "Table 1: Annual Estimates of the Population for Counties of Arizona: April 1, 2000 to July 1, 2006," <http://www.census.gov/popest/counties/tables/CO-EST2006-01-04.xls>. For most of the period under consideration in this paper, it is reasonable to focus primarily upon Maricopa County in studying the Phoenix metropolitan area. As growth spreads into Pinal County, that becomes less true.

⁴ *Arizona Republic*, June 25, 1976, B1.

⁵ David R. Goldfield, *Cotton Fields and Skyscrapers: Southern City and Region, 1607-1980* (Baton Rouge: Louisiana State University Press, 1982), 99, 129-30, 152-53; Kenneth T. Jackson, *Crabgrass Frontier: The Suburbanization of the United States* (New York: Oxford University Press, 1985), 138-56; Carl Abbott, *The New Urban America: Growth and Politics in Sunbelt Cities*, 2nd ed., rev. (Chapel Hill: University of North Carolina Press, 1987), 54-55, 175-84; Jon C. Teaford, *The Twentieth-Century American City: Problem, Promise, and Reality*, 2nd ed. (Baltimore: Johns Hopkins University Press, 1993), 72, 108-9, 146.

⁶ Jackson, *Crabgrass Frontier*, 144.

⁷ *Ibid.*, 145-46.

⁸ *Ibid.*, 153-54.

⁹ Richardson Dilworth, *The Urban Origins of Suburban Autonomy* (Cambridge, Mass.: Harvard University Press, 2005), 27.

¹⁰ Abbott, *New Urban America*, 54.

¹¹ Philip J. Tronstine and Terry Christensen, *Movers and Shakers: The Study of Community Power* (New York: St. Martins Press, 1982), 92-93; Carl Abbott, *The Metropolitan Frontier: Cities in the Modern American West* (Tucson: University of Arizona Press, 1993), 40.

¹² William Fulton, *The Reluctant Metropolis: The Politics of Urban Growth in Los Angeles* (Point Arena, CA: Solano Press Books, 1997), 75.

¹³ Ann O'M. Bowman and Michael A. Pagano, *Terra Incognita: Vacant Land and Urban Strategies* (Washington, D.C.: Georgetown University Press, 2004), 131-36.

¹⁴ Teaford, *Twentieth-Century American City*, 146.

¹⁵ ARIZ. CODE §§ 16-701, -702, -705 (Bobbs-Merrill 1940). On January 9, 1956, revisions to the Arizona law eliminated the provisions allowing for annexation by petition to superior court. Those provisions had been determined to be unconstitutional; only the legislative department of government, not the judicial department, had jurisdiction over

annexation. See "Reviser's Notes" in "Historical and Statutory Notes," ARIZ. REV. STAT. ANN. § 9-471, at 192 (West 1996).

¹⁶ William S. Collins, *The Emerging Metropolis: Phoenix, 1944-1973* (Phoenix: Arizona State Parks Board, 2005), 95; "Notes of Decisions," Note 26 citing *City of Phoenix v. State ex rel. Harless* (1941) 58 Ariz. 8, 117 P.2d 87, ARIZ. REV. STAT. ANN. § 9-471, at 199-200 (West 1996). See Collins, *Emerging Metropolis*, pp. 85-86, 89-90, 95-96 for additional discussion of the legal history of annexation in the 1940s-1950s.

¹⁷ Arizona has transaction privilege taxes rather than traditional sales taxes. They are not imposed on the purchaser of the goods, but on the seller for the privilege of conducting business. The population-based state shared revenues did not all exist throughout the entire time period studied in this paper.

¹⁸ League of Arizona Cities and Towns, *A Guide for Annexation*, December 1973, 2.

¹⁹ *Phoenix Gazette*, June 18, 1974, A2, December 3, 1974, C11.

²⁰ For example, a retrospective cost/benefit analysis of a 1972 annexation by Phoenix showed that it cost the city more than it received in revenue in the first two fiscal years, though the report predicted that the relationship between costs and revenues was likely to become more positive in the future. See City of Phoenix, Budget and Research Department Research Report no. 75-27, "Cost/Benefit Analysis of the 1972 Deer Valley Annexation," October 9, 1974. Similarly, the City of Phoenix, Management and Budget Department Management Report No. MB 79-66, "Cost-Revenue Impact of Annexing a Northwest Area," November 15, 1978, concluded that the annexation being analyzed would be financially beneficial after two to three years. In 1982, Phoenix city departments concluded that annexation in areas to the west and southwest would result in immediate costs exceeding revenues. By the third year, general revenue fund benefits would be positive, although by less than the amount of water and wastewater surcharges that would be lost when the areas were annexed. The study recommended that the city annex only contiguous parcels where development appeared imminent, a positive cost-revenue projection was made, and infrastructure was funded by the developer. See Marvin A. Andrews et al., "Annexation Implications: Western and Southwestern Phoenix, Arizona," prepared by the Phoenix Planning Department in cooperation with other city departments, March 1982, pp. 3-4, 48. Other reports also emphasized various aspects of the timing of annexation, including setting dates for annexation such that property tax revenue would arrive in time for the next fiscal year. See City of Phoenix, Management and Budget Department Management Report No. MB 81-268, "Budgetary Impact of Annexing the Southeast Area," June 22, 1981. The "Annexation Policy Study" produced by the City of Phoenix Planning Department (December 1988) discussed variables affecting the short term revenue/cost ratio (including population density, proximity to existing services, nonresidential land use, infrastructure needs and finance, and timing), the approach used by the city to determine benefits and costs, and difficulties in calculating revenue/cost ratios (see pp. 4-5, 10-13). It concluded (p. 28) that "in return for the longer term economic benefits enabling it to be a strong core city, Phoenix has

temporarily subsidized the operating costs of service delivery to areas with low density, scattered residential development and few commercial areas."

²¹ Minutes of Work Study Session of the Town of Gilbert Common Council and Planning & Zoning Commission, January 16, 1979, Town Clerk's Office, Gilbert, Arizona. See also *Gilbert Tribune*, July 13, 1995, B4, August 15, 1995, B1. Gilbert sought to annex residents of nine Maricopa County neighborhoods before the mid-decade census of 1995. If it had succeeded, it would have gained about \$340,000 in state-shared revenue.

²² *Arizona Republic*, January 29, 1999, 1 [Southwest Valley Community section], May 19, 1999, 1 [Southwest Valley Community section], May 21, 1999, 3 [Sun Cities/Surprise Community section]; Committee on Public Institutions and Universities, Arizona House of Representatives, Minutes of Meeting, 3/9/99, http://www.azleg.state.az.us/legtext/44leg/1r/comm_min/house/0309.piu.htm.

²³ David Rusk, *Cities Without Suburbs*, 2nd ed. (Washington, D.C.: Woodrow Wilson Center Press, 1995), 10.

²⁴ *Arizona Republic*, November 13, 1974, B2. See also *Phoenix Gazette*, October 31, 1974, A16; John Wenum, *Annexation as a Technique for Metropolitan Growth: The Case of Phoenix, Arizona* (Tempe: Institute of Public Administration, Arizona State University, 1970), 51-52, 57; Bradford Luckingham, *Phoenix: The History of a Southwestern Metropolis* (Tucson: University of Arizona Press, 1989), 161-62; Philip VanderMeer, *Phoenix Rising: The Making of a Desert Metropolis* (Carlsbad, Ca.: Heritage Media Corp., 2002), 41; Grady Gammage, Jr., *Phoenix in Perspective: Reflections on Developing the Desert*, 2nd ed. (Tempe: Herberger Center for Design Excellence, College of Architecture and Environmental Design, Arizona State University, 2003), 36-39, 49; Collins, *Emerging Metropolis*, 8, 94; Patricia Gober, *Metropolitan Phoenix: Place Making and Community Building in the Desert* (Philadelphia: University of Pennsylvania Press, 2006), 34-35.

²⁵ Norman Y. Cravens, Executive Assistant to the City Manager, to John B. Wentz, City Manager, "Effects of Annexation on the City of Phoenix," October 17, 1974 [transmitted by Wentz to the Mayor and City Council of Phoenix, October 28, 1974], City of Phoenix, Budget and Research Department, Phoenix, Arizona.

²⁶ *Phoenix Gazette*, March 24, 1978, C6.

²⁷ *Phoenix Gazette*, July 4, 1978, A4. Janet Rothenberg Pack, in *Growth and Convergence in Metropolitan America* (Washington, D.C.: Brookings Institution Press, 2002), 41-45, 192-95, disagreed with Rusk's assertions that annexation brought metropolitan-wide benefits. She concluded that central cities were the main beneficiaries. For a sample of 250 metropolitan areas during 1960-90, annexation did not lead to significant increases in growth of population or per capita income in the suburbs or the metropolitan area as a whole. Much of what may appear to be effects of annexation actually were regional

effects; annexations were concentrated in regions of high growth (the South and West). According to Pack (p. 42), central city residents benefited from the improved tax base: "The one clear change is that the newly enlarged city will generally have a sounder fiscal base after incorporating suburban areas, which will account for the higher city bond rating Rusk cites, and this will be a real benefit to the residents of the original city, at least in the short run." This assumes that at least some of the additional revenues resulting from the sounder fiscal base are spent within the original city boundaries.

²⁸ *Arizona Republic*, November 17, 1995, A1.

²⁹ *Gilbert Independent*, May 20-26, 1987, 11. This annexation had been requested by a prospective developer of the auto mall and other projects. See *Arizona Republic*, January 30, 1987, SE Extra 6.

³⁰ *Arizona Republic*, January 18, 2005.

³¹ Property tax information provided by League of Arizona Cities and Towns, e-mail from Brent Stoddard to author, February 15, 2005. The municipalities in Maricopa County without primary or secondary property taxes were Carefree, Guadalupe, Litchfield Park, Mesa, Paradise Valley, Queen Creek, and Youngstown; those in Pinal County were Apache Junction and Maricopa. Some of these municipalities had not yet incorporated in earlier decades. It is not clear whether there is a linear relationship between the extent of a city's dependence on sales tax revenues and its propensity to annex or to offer incentives to firms generating tax revenues to locate within its borders. An interesting study of three U.S. cities showed that different fiscal structures were associated with different development policies. Oklahoma City, heavily reliant on sales taxes, promoted retail development. Columbia, South Carolina, drawing more of its income from property taxes, sought residential and commercial land development to preserve property values citywide, promote revitalization, and reduce blight. Columbus, Ohio, more dependent on income taxes, stressed job creation. See Michael A. Pagano, "City Fiscal Structures and Land Development," Discussion Paper prepared for The Brookings Institution Center on Urban and Metropolitan Policy and CEOs for Cities, April 2003. This idea was developed further in O'M. Bowman and Pagano, *Terra Incognita*, 49-84.

³² American Farmland Trust, "Fact Sheet: Cost of Community Services Studies," Aug. 2007, at www.farmlandinfo.org/documents/27757/COCS_09-2007.pdf. The cost for residential development varied from \$1.01 in Groton, New Hampshire to \$2.27 in Appling County, Georgia. None of these studies was of an Arizona community.

³³ *Arizona Republic*, March 29, 1978, B2.

³⁴ *Arizona Business Gazette*, July 20, 1987, 8. It is, of course, possible that planning was offered as a rationale for annexation when another motivation (such as tax revenues) was equally or more important. However, there did not seem to be great reluctance on the part of municipal officials to put forward tax revenues as a reason for annexation, so it

appears that concerns about planning were genuine, and not merely a smokescreen for other motivations. It does not necessarily follow that growth in fact will be well-planned as a result of annexation. Municipalities do not always have the tools or political conditions to allow the quality of planning they might desire. Similarly, a belief that annexation will bring net economic benefits can be a motivation for annexation regardless of whether the belief is correct. Even if studies are undertaken, municipal officials may not have complete, accurate information about the costs and benefits of annexation.

³⁵ Morrison Institute for Public Policy, *Hits and Misses: Fast Growth in Metropolitan Phoenix* (Tempe: Morrison Institute for Public Policy, School of Public Affairs, College of Public Programs, Arizona State University, 2000), 26.

³⁶ *Arizona Republic*, July 7, 1977, A6.

³⁷ Wenum, *Annexation*, 41; *Phoenix Gazette*, October 29, 1974, B2, October 9, 1981, B1.

³⁸ *Phoenix Gazette*, February 16, 1977, C3.

³⁹ Harvey Molotch, "The City as a Growth Machine: Toward a Political Economy of Place," *American Journal of Sociology* 82 (Sept. 1976); John H. Mollenkopf, *The Contested City* (Princeton: Princeton University Press, 1983); John R. Logan and Harvey L. Molotch, *Urban Fortunes: The Political Economy of Place* (Berkeley: University of California Press, 1987); Andrew E. G. Jonas and David Wilson, eds., *The Urban Growth Machine: Critical Perspectives, Two Decades Later* (Albany: State University of New York Press, 1999).

⁴⁰ Molotch, "City as a Growth Machine," 310, 314-17.

⁴¹ *Arizona Weekly Gazette*, January 1, 1980, 2, Section A; *Arizona Republic*, November 2, 1987, Extra 2N-B, September 15, 1998, EV1, January 21, 1999, EV3, June 26, 2004.

⁴² Molotch, "City as a Growth Machine," 315.

⁴³ Paul Lowes, "The Ideology and Influence of the Phoenix Newspapers, 1965-1990: Polyphemus Blinded" (master's thesis, Arizona State University, 1995), 70-71; Russell Pulliam, *Publisher: Gene Pulliam, Last of the Newspaper Titans* (Ottawa, Ill.: Jameson Books, 1984), 137. In Lowes's view, the newspapers' conservatism turned to reactionism in some cases.

⁴⁴ Pulliam, *Publisher*, 135. On charter government, see Michael Francis Konig, "Toward Metropolitan Status: Charter Government and the Rise of Phoenix, Arizona, 1945-1960" (Ph.D. dissertation, Arizona State University, 1983); Lowes, "Ideology and Influence," 147-66; VanderMeer, *Phoenix Rising*, 29-33, 45-51, 84, 86-87.

⁴⁵ Wenum, *Annexation*, 51-52; Konig, "Toward Metropolitan Status," 82-85, 96-115.

⁴⁶ Luckingham, *Phoenix*, 200-01; Pulliam, *Publisher*, 137, 283-86; Lara Tobias Bickell, "Southwest Sunbelt Booster Eugene C. Pulliam and His Changing Vision of Phoenix, Arizona, 1946-1975" (master's thesis, Pepperdine University, 1997), 85-90; Lowes, "Ideology and Influence," 91-95, 147-66.

⁴⁷ *Arizona Business Gazette*, July 20, 1987, 8; *Arizona Republic*, May 1, 1988, A1.

⁴⁸ *Arizona Republic*, February 8, 1985, B5. See also *Arizona Republic*, January 25, 1985, A1, January 26, 1985, A26.

⁴⁹ Bradley Hill, Water Resources Manager, City of Peoria, interview by the author, Peoria, Arizona, April 7, 2004; "Development and Annexation Agreement White Peak Ranch and Lakeland Village," October 22, 2001, City Clerk's Office, Peoria, Arizona.

⁵⁰ John V. Moeser and Rutledge M. Dennis, *The Politics of Annexation: Oligarchic Power in a Southern City* (Cambridge, Mass.: Schenkman Publishing Company, 1982); Ronald H. Bayor, "Models of Ethnic and Racial Politics in the Urban Sunbelt South," in *Searching for the Sunbelt: Historical Perspectives on a Region*, ed. Raymond A. Mohl (Knoxville: University of Tennessee Press, 1990), 105-23; D. Andrew Austin, "Politics vs. Economics: Evidence from Municipal Annexation," *Journal of Urban Economics* 45 (May 1999):501-32. Outlying white communities might oppose annexation if it meant joining urban school systems, as in Birmingham, Alabama. See Charles E. Connerly, "'One Great City' or Colonial Economy? Explaining Birmingham's Annexation Struggles, 1945-1990," *Journal of Urban History* 26 (November 1999):44-73.

⁵¹ The percentage of the Phoenix population whose race was nonwhite was 6.2 in 1950, 5.8 in 1960, 6.7 in 1970, 15.7 in 1980, 18.3 in 1990, and 25.7 or 28.9 in 2000, depending on whether those of "Two or more races" are included in the number for white or nonwhite. See U.S. Bureau of the Census, *County and City Data Book, 1952, 1962, 1972, 1983, 1994, 2000* (Washington, D.C.: U.S. Government Printing Office, 1953, 1962, 1973, 1983, 1994, 2000), table 4, 442; table 6, 476; table 6, 630; table C, 650; table C, 650; table C-2, 662. Census 2000 data on race are not directly comparable with those from earlier censuses. People identifying their origin as Spanish, Hispanic, or Latino may be of any race. The percentage of the Phoenix population that was "Spanish origin" in 1980 was 14.8, "Hispanic origin" in 1990 was 20.0, and "Hispanic or Latino" in 2000 was 34.1. See *County and City Data Book, 1983, 1994, 2000* (table C, 650; table C, 651; table C-1, 644).

⁵² *Arizona Republic*, November 4, 1979, A15, November 14, 1979, A1.

⁵³ Amy Bridges, *Morning Glories: Municipal Reform in the Southwest* (Princeton; Princeton University Press, 1997), 154.

⁵⁴ Wenum, *Annexation*, 51-58; Collins, *Emerging Metropolis*, 85-90. In 1954, the water companies sponsored legislation that prevented expansion of municipal water services in areas they served.

⁵⁵ Edna McEwen Ellis, *Sunny Slope: A History of the North Desert Area of Phoenix* (Phoenix: Art Press, 1990), 94-102, 108-11; VanderMeer, *Phoenix Rising*, 40-41, 91; Collins, *Emerging Metropolis*, 90-94.

⁵⁶ *Arizona Republic*, August 19, 2003.

⁵⁷ Philip R. VanderMeer, "Postwar Phoenix: Intentional Change and Essential Continuities," in "*Provincias Internas*": *Continuing Frontiers: Proceedings of a Symposium Held at Phoenix College, March 28, 2003*, ed. Pete Dimas (Tucson: Arizona Historical Society, 2007), 70-73; VanderMeer, *Phoenix Rising*, 44-46, 90-92; Gober, *Metropolitan Phoenix*, 124-28; Michael F. Logan, *Fighting Sprawl and City Hall: Resistance to Urban Growth in the Southwest* (Tucson: University of Arizona Press, 1995); Michael F. Logan, *Desert Cities: The Environmental History of Phoenix and Tucson* (Pittsburgh: University of Pittsburgh Press, 2006); Wenum, *Annexation*, 75-90.

⁵⁸ Wenum, *Annexation*, 44-47; Konig, "Toward Metropolitan Status," 84-85, 96-98; VanderMeer, *Phoenix Rising*, 28-32, 39-41; Collins, *Emerging Metropolis*, 45-66, 82, 86-87, 90, 95-96.

⁵⁹ Collins, *Emerging Metropolis*, 96.

⁶⁰ *Arizona Republic*, September 20, 1951, 1. A similar claim concerning the relationship between revenues and the cost of services had been made by the chairman of the mayor's finance advisory committee in 1947, and city officials reiterated the point in 1965 (Collins, *Emerging Metropolis*, 48-49; Wenum, *Annexation*, 41).

⁶¹ *Arizona Republic*, July 1, 1957, 6.

⁶² *Arizona Republic*, March 25, 1959, A1; Collins, *Emerging Metropolis*, 98-99. Tax concessions also were associated with annexation of a west side industrial area in 1949 (Konig, "Toward Metropolitan Status," 95-96). Connerly described how iron and steel firms, particularly U.S. Steel, "strongly resisted annexation into Birmingham, preferring to remain in unincorporated areas or jurisdictions in which such firms paid lower taxes or had greater control" (Connerly, "One Great City," 49).

⁶³ *Arizona Republic*, April 19, 1958, 1; Konig, "Toward Metropolitan Status," 107-8.

⁶⁴ Wenum, *Annexation*, 49.

⁶⁵ *Arizona Republic*, December 6, 1975, A6.

⁶⁶ Collins, *Emerging Metropolis*, 96; Wenum, *Annexation*, 85-89.

⁶⁷ *Arizona Republic*, March 6, 1963, 1, March 11, 1963, 8.

⁶⁸ *Arizona Republic*, March 11, 1963, 8.

⁶⁹ Collins, *Emerging Metropolis*, 97; Wenum, *Annexation*, 87-89.

⁷⁰ Collins, *Emerging Metropolis*, 97; Wenum, *Annexation*, 87; Resolution No. 1011, "A Resolution of the City Council of the City of Tempe, Arizona, Indicating Certain Future Annexation Policies of the Cities of Chandler and Tempe, Arizona, Relative Adjacent [sic], Contiguous and Presently Unannexed Land Located Between the Respective Communities, 19th December 1968, and Minutes of Regular Council Meeting, December 19, 1968, both at City Clerk's Office, Tempe, Arizona; *Phoenix Gazette*, December 17, 1968, 15.

⁷¹ Resolution No. 1083, "A Resolution of the City Council of the City of Tempe, Arizona, Affirming Certain Future Annexation Policies of the Cities of Chandler and Tempe, Arizona, Relative Adjacent [sic], Contiguous and Presently Unannexed Land Located Between the Respective Communities, 10th June, 1971, and Minutes of the Regular Council Meeting of June 10, 1971, both at City Clerk's Office, Tempe, Arizona; *Phoenix Gazette*, May 26, 1971, A18, October 23, 1974, B15, October 28, 1974, C7, November 26, 1974, A11.

⁷² *Arizona Republic*, April 19, 1978, B2; *Phoenix Gazette*, August 13, 1987, B7; *Arizona Republic*, September 4, 1987, 3NA.

⁷³ *Phoenix Gazette*, July 24, 1987, C6, May 27, 1987, SE1; *Arizona Republic*, June 3, 1987, SE Extra A; *Gilbert Independent*, May 27-June 2, 1987, 12.

⁷⁴ *Arizona Republic*, January 16, 2005.

⁷⁵ Ordinance No. 174, "An Ordinance of the Mayor and Common Council of the Town of Gilbert, Maricopa County, Arizona Pursuant to the Provisions of Article 7, Chapter 4, Title 9, Arizona Revised Statutes and Amendments Thereto, by Annexing Thereto Certain Territory Contiguous to the Existing Town Limits of the Town of Gilbert and Declaring an Emergency," January 8, 1975, Town Clerk's Office, Gilbert, Arizona; *Phoenix Gazette*, November 21, 1974, A21, November 26, 1974, A11, January 9, 1975, B12, *Arizona Republic*, January 19, 1975, B6.

⁷⁶ *Arizona Republic*, January 19, 1975, B6. See also *Phoenix Gazette*, January 9, 1975, B12, January 21, 1975, C7. The Maricopa Association of Governments' "Municipality Population and Housing Unit Update" (http://www.mag.maricopa.gov/pdf/cms.resource/MAG_2006_07-01_Municipality-Updates13942.pdf) put Gilbert's population at 185,030 as of July 1, 2006.

⁷⁷ "Gilbert, Arizona – a quarter century East of Phoenix," *Arizona Real Estate Press* 1 (May 1976), 14.

⁷⁸ *Phoenix Gazette*, October 9, 1974, B1, October 29, 1974, B2.

⁷⁹ *Phoenix Gazette*, October 10, 1981, B1.

⁸⁰ *Arizona Republic*, May 6, 2003.

⁸¹ *Arizona Republic*, October 16, October 21, November 6, 2003. Buckeye was skeptical that reimbursement from Rural/Metro would be forthcoming. The issue of county islands remained controversial, particularly for Gilbert, which maintained that it was not responsible for providing services to county island residents who refused to be annexed into Gilbert. Legislation in 2006 (House Bill 2145) that would have required Gilbert to provide services to county islanders who created a fire district was declared unconstitutional by the Arizona Court of Appeals, on the grounds that it was special legislation aimed specifically at Gilbert. A 2007 law (House Bill 2780) allowed scattered county islands to form a fire district and required the surrounding municipality to provide service for a fee if the fire district was unable to obtain services from another provider. The law was passed after an incident in which Gilbert firefighters, following town policy, responded to a fire at a county island home but did not fight the fire because there was no threat to life. During the summer of 2007, Gilbert continued to encourage annexation and to oppose town provision of services to county islands. By August, 68 percent of county island parcels within Gilbert's planning area had annexed into Gilbert, but residents who did not wish to annex formed a fire district that became official on January 18, 2008. The Gilbert Fire Department was required to provide services (*Arizona Republic*, June 22, 2008 [Mesa Republic West section], September 1, December 20, 2007 [Gilbert Republic section], June 18, 2008).

⁸² *Arizona Republic*, January 22, 1978, B3.

⁸³ *Petitioners for Deannexation v. City of Goodyear*, 773 P.2d 1026 (Ariz. App. Ct. 1989).

⁸⁴ *Mesa Tribune*, January 20, 1975, 1.

⁸⁵ *Arizona Republic*, June 25, 1976, B1.

⁸⁶ *Arizona Republic*, July 23, 1976, B1.

⁸⁷ *Arizona Republic*, July 7, 1977, A6.

⁸⁸ *Arizona Republic*, May 28, 1976, B3.

⁸⁹ *Arizona Republic*, March 24, 1978, C6.

⁹⁰ ARIZ. REV. STAT. ANN. § 9-471 (I) (West 1996).

⁹¹ *Ibid.*, § 9-471 (H).

⁹² *Ibid.*, § 9-471 (A)(4).

⁹³ *Arizona Republic*, July 6, 1977, A1.

⁹⁴ *Arizona Republic*, July 1, 1980, B1, July 23, 1980, NE Extra 1, August 1, 1980, B1.

⁹⁵ *Arizona Republic*, January 25, 1985, A1, January 28, 1985, A1.

⁹⁶ *Arizona Republic*, February 8, 1985, B5; Carol E. Heim, "Leapfrogging, Urban Sprawl, and Growth Management: Phoenix, 1950-2000," *American Journal of Economics and Sociology* 60 (January 2001):245-83.

⁹⁷ *Republic Investment Fund I v. the Town of Surprise & Maricopa County. Petitioners for Deannexation v. City of Goodyear*, 800 P.2d 1251 (Ariz. 1990); *Phoenix Gazette*, August 1, 1990, B3.

⁹⁸ City of Phoenix Planning Department, "Annexation Policy Study," December 1988, 28-29; *Phoenix Gazette*, January 25, 1989, B1, February 25, 1989, B1, July 19, 1988, A10; Joy A. Mee, Assistant Planning Director, City of Phoenix, interview by the author, Phoenix, Arizona, June 18, 2003.

⁹⁹ *Arizona Republic*, March 25, 1987, B1, April 4, 1987, A14, November 17, 1987, B1; VanderMeer, *Phoenix Rising*, 90-91.

¹⁰⁰ *Arizona Republic*, November 28, 2004, October 26, 2003, April 18, 2004, May 27, 2003; Regular Council Meeting Minutes, October 15, 2002, Town Clerk's Office, Buckeye, Arizona. Buckeye had made an earlier attempt in 1989 to annex land for large-scale development (a 48,000-acre master-planned development known as Sun Valley), but although the annexation was approved the project did not go forward at that time and many of its investors ended up in bankruptcy.

¹⁰¹ *Arizona Republic*, January 1, 1998, 1 [Northwest Valley Community section], December 17, 1999, 1 [Sun Cities/Surprise Community section], December 22, 1999, EV13, August 30, 2002.

¹⁰² *Arizona Republic*, February 10, 15, 2005. El Mirage, also eager for tax revenues, unsuccessfully sued Glendale in 2005, seeking to reverse this strip annexation and open up the land near Loop 303 for its own annexation. The suit claimed that open meeting law had been violated in the annexation process. El Mirage appealed to the Arizona Supreme Court in 2008. See *Arizona Republic*, June 14, 2008 [Southwest Valley Community section].

¹⁰³ John A. Souder and Sally K. Fairfax, *State Trust Lands: History, Management, and Sustainable Use* (Lawrence, Kansas: University Press of Kansas, 1996); Andy Laurenzi, "State Trust Lands: Balancing Public Value and Fiduciary Responsibility," *Land Lines: Newsletter of the Lincoln Institute of Land Policy* 16 (July 2004):1-4; Peter W. Culp and Susan K. Culp, "State Trust Lands: The Future of Urban Growth in Arizona, in *Land Use: Challenges and Choices for the 21st Century*, ed. Patricia Gober (Phoenix: Arizona Town Hall, 2007), 51-62, 126-28;

http://www.aztownhall.org/pdf/Complete_91st_Report_FINAL.pdf; *Arizona Republic*, September 20, 22, December 25, 2004.

¹⁰⁴ Catherine Balzano, Planner III, Real Estate Division, Arizona State Land Department, interviews by the author, Phoenix, Arizona, March 19, April 5, 2004; City of Phoenix Annexation Request A-00-01 (Revised).

¹⁰⁵ Grady Gammage, Jr., et al., *The Treasure of the Superstitions: Scenarios for the Future of Superstition Vistas* (Tempe, Ariz.: Morrison Institute for Public Policy, Arizona State University, 2006; *Arizona Republic*, August 15, 2007 [Mesa Community section], May 31, 2008, July 2, 31, 2008 [Mesa Community section]; Culp and Culp, "State Trust Lands," 61.

¹⁰⁶ Subhrajit Guhathakurta and Michele L. Wichert, "Who Pays for Growth in the City of Phoenix: An Equity-Based Perspective on Suburbanization," *Urban Affairs Review* 33 (July 1998):813-38; Gammage, *Phoenix in Perspective*, 128-32.

¹⁰⁷ Donald E. Hadder, Sr., Principal Planner, City of Scottsdale, interview by the author, Scottsdale, Arizona, June 10, 2003.

¹⁰⁸ Gammage, *Phoenix in Perspective*, 54.

¹⁰⁹ City of Phoenix, *Phoenix Concept Plan 2000: A Program for Planning*, adopted by the City Council July 31, 1979; John Pickus and Patricia Gober, "Urban Villages and Activity Patterns in Phoenix," *Urban Geography* 9 (January-March 1988):85-97; Elizabeth K. Burns and Patricia Gober, "Job Linkages in Inner-City Phoenix," *Urban Geography* 19 (January 1-February 14, 1998):12-23; Gober, *Metropolitan Phoenix*, 155-58, 203; Gammage, *Phoenix in Perspective*, 2-4, 49-50, 54-58.

¹¹⁰ *Arizona Republic*, October 25, 2003; Mary Jo Waits and William Fulton, *Which Way Scottsdale? Scottsdale 2.0: Next Version* (Tempe: Morrison Institute for Public Policy, Arizona State University, 2003); *Arizona Republic*, January 20, 2005, July 29, 2008 [Scottsdale Community section]. On responses to build-out in large, fast-growing suburbs, see Robert Lang and Jennifer LeFurgy, "Boomburb 'Buildout': The Future of Development in Large, Fast-Growing Suburbs," *Urban Affairs Review* 42 (March 2007):533-52.

¹¹¹ *Arizona Republic*, October 10, 2003; City of Chandler, *Next Twenty: A New, Progressive Agenda for Chandler* (Chandler, Ariz.: City of Chandler, 2007); City of Chandler, Resolution No. 3952, adopted by the Chandler City Council on Mar. 23, 2006. A drop in new construction has significant revenue consequences because construction activity is an important source of tax revenues and fees. For more detailed examination of fiscal consequences of build-out, see Carol E. Heim, "Municipal Fiscal Structures and Land-Based Growth in the Phoenix Metropolitan Area," Lincoln Institute of Land Policy Working Paper, January 2007, and Carol E. Heim, "Taxes, Incentives, and Fiscal Policy Choices," in *Land Use: Challenges and Choices for the 21st Century*, ed. Patricia Gober

(Phoenix: Arizona Town Hall, 2007), 87-98, 130-31,
http://www.aztownhall.org/pdf/Complete_91st_Report_FINAL.pdf.

¹¹² Luckingham, *Phoenix*, 260-61; Gober, *Metropolitan Phoenix*, 169-70, 186-96.

¹¹³ *Arizona Republic*, October 2, 3, 2003; Valley Partnership, *New Developments*, vol. 12, issue 7, July 2003, <http://www.valleypartnership.org/uploads/July2003.htm>; Grady Gammage, Jr., "Proposition 207," in *Land Use: Challenges and Choices for the 21st Century*, ed. Patricia Gober (Phoenix: Arizona Town Hall, 2007), 41-50, 126, http://www.aztownhall.org/pdf/Complete_91st_Report_FINAL.pdf. Christine Meisner Rosen showed in *The Limits of Power: Great Fires and the Process of City Growth in America* (Cambridge: Cambridge University Press, 1986) that even in cases where there appeared to be a physical *tabula rasa*, after major fires in Chicago, Boston, and Baltimore, difficulties associated with dispersed property rights hampered redevelopment. On tools available for downtown redevelopment in Arizona, see William Fulton, Mary Jo Waits, and Susan Weaver, *Playing the Inside Game: The Challenge of Urban Revitalization in Arizona* (Tempe: Morrison Institute for Public Policy, Arizona State University, 2004).

¹¹⁴ City of Phoenix, "Downtown Phoenix: A Strategic Vision and Blueprint for the Future," December 14, 2004, <http://phoenix.gov//DOWNTOWN/index.html>; *Arizona Republic*, June 9, 10, September 15, 2004, April 14, 2008.

¹¹⁵ David Richert, Planning Director, City of Phoenix, interview by the author, Phoenix, Arizona, June 19, 2003.

¹¹⁶ Debra Stark, Community Development Director, City of Peoria, interview by the author, Peoria, Arizona, March 8, 2004; *Arizona Republic*, April 18, 2004. Chad Daines (Planning Manager, City of Peoria) explained that there may be other reasons for down-zoning than an excess of sites zoned for commercial use. For example, a site may be unable to attract commercial development due to poor freeway access (interview by the author, Peoria, Arizona, January 12, 2006).

¹¹⁷ Retail establishments differ in this respect from manufacturing plants, which are more footloose.

¹¹⁸ *Arizona Republic*, May 18, 2004.

¹¹⁹ *Arizona Republic*, June 22, 2003.

¹²⁰ *Tempe Daily News Tribune*, July 13, 1995, B4; *Arizona Republic/Phoenix Gazette*, March 22, 1996, 7 [Chandler Community section].

¹²¹ "Modification of Memorandum of Understanding among Tempe/Chandler/Developers dated April 3, 1996, C96-74A," dated 31 January, 2003, City Clerk's Office, Chandler, Arizona.

¹²² "Intergovernmental Agreement," A-7-175, Res. 2799, C98-71, IGA – Chapman2/Tempe, 4/17/98 RL, City Clerk's Office, Chandler, Arizona.

¹²³ *Arizona Republic*, September 15, 24, 2004.

¹²⁴ Arizona State Senate, Forty-seventh Legislature, First Regular Session, "Final Amended Fact Sheet for S.B. 1274," <http://www.azleg.state.az.us>.

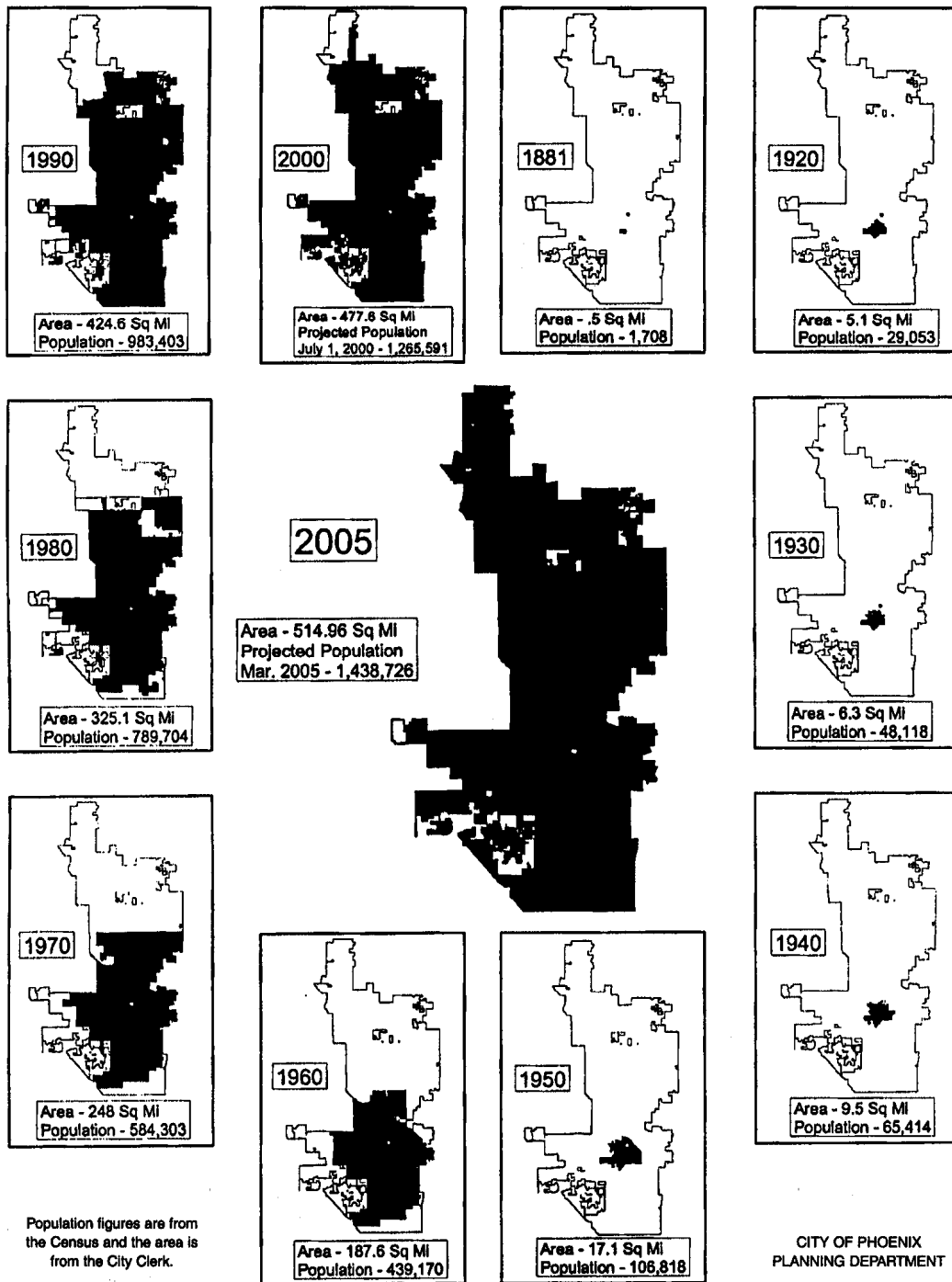
¹²⁵ *Arizona Republic*, January 19, 2005 [Scottsdale Republic North section], January 25, 2005.

¹²⁶ The loophole also exempted Marana. Marana has annexed some territory in Pinal County, as Peoria has done in Yavapai County. But neither municipality is completely within the boundaries of the Phoenix-Mesa-Scottsdale MSA, which is necessary for the legislation to apply.

¹²⁷ *Arizona Republic*, January 19, 2005 [Scottsdale Republic North section], May 6, 2005 [Phoenix Community North section]; Morrison Institute for Public Policy, *The Future at Pinal: Making Choices, Making Places* (Phoenix: Morrison Institute for Public Policy, Arizona State University, 2007), 40. One fruitful line of approach to studying joint revenue sharing agreements among municipalities might be to compare them with cartel agreements among firms. I am grateful to Thomas Maloney, the discussant of this paper at the 2005 annual meeting of the Social Science History Association, for this suggestion.

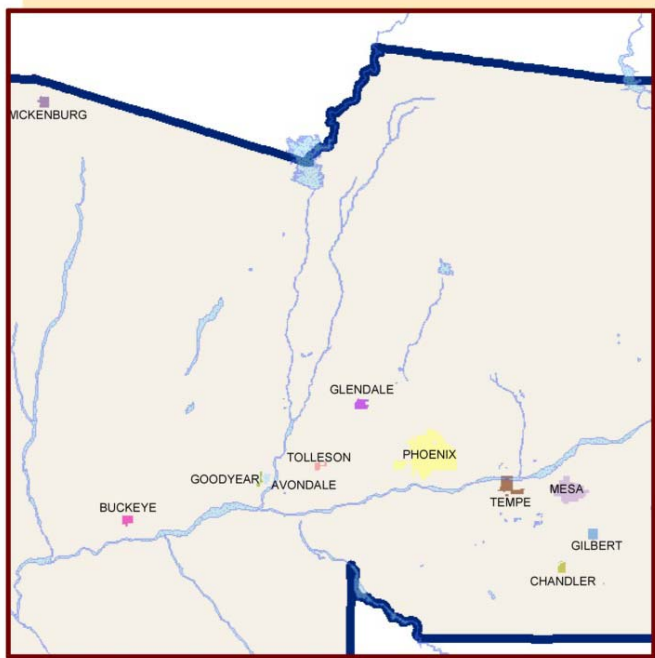
¹²⁸ *Arizona Republic*, May 15, 2008 [Mesa Community section].

FIGURE 1
Growth of Phoenix, 1881-2005

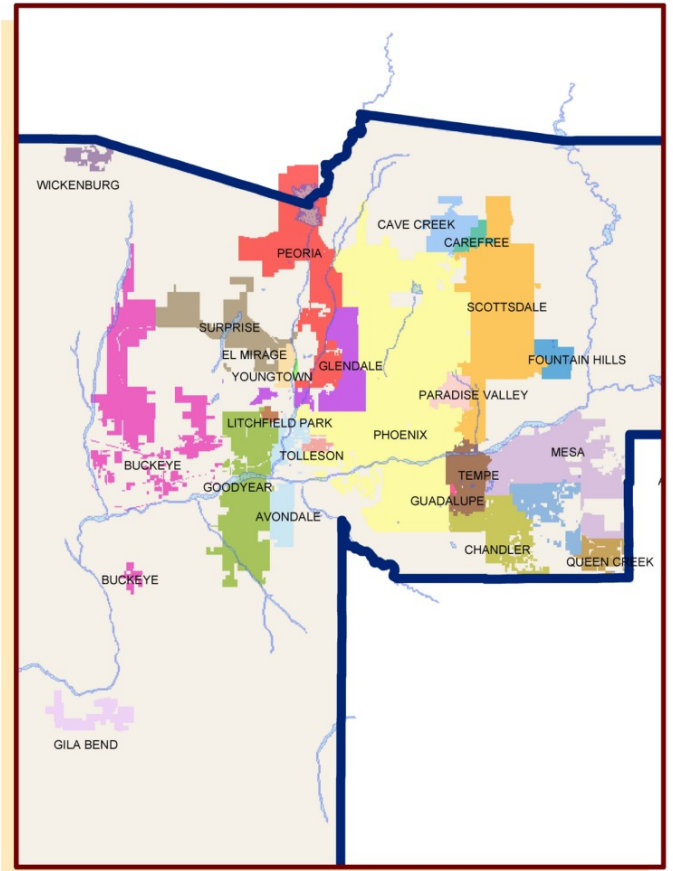


SOURCE: City of Phoenix, Phoenix Summary Budget 2005-06, Community Profile and Trends, p. 16, at <http://phoenix.gov/BUDGET/bud05pro.pdf>.

FIGURE 2
Annexation by Maricopa County Cities and Towns, 1950-2000



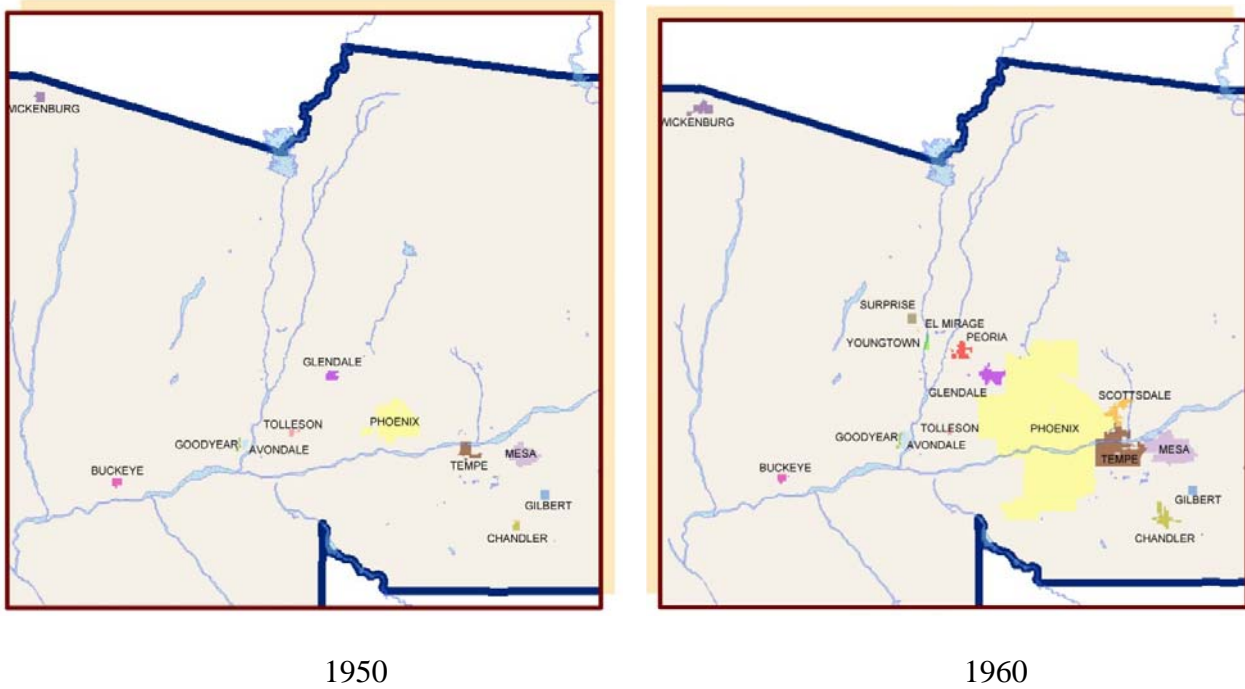
1950



2000

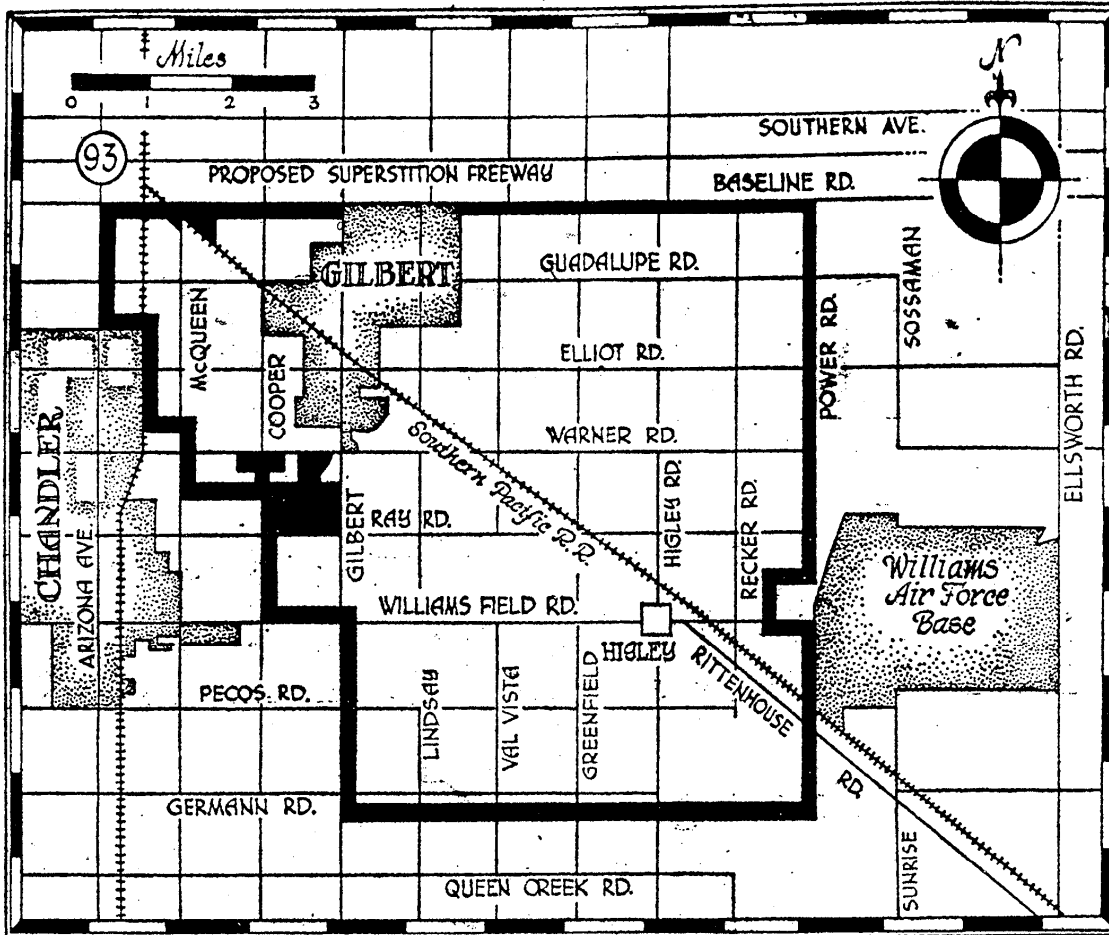
SOURCE: Maps taken from "City Growth Time Line," Maricopa County Planning and Development Department, Phoenix, Arizona.

FIGURE 3
Annexation by Maricopa County Cities and Towns, 1950-1960



SOURCE: Maps taken from "City Growth Time Line," Maricopa County Planning and Development Department, Phoenix, Arizona.

FIGURE 4
Strip Annexation by Gilbert, 1975

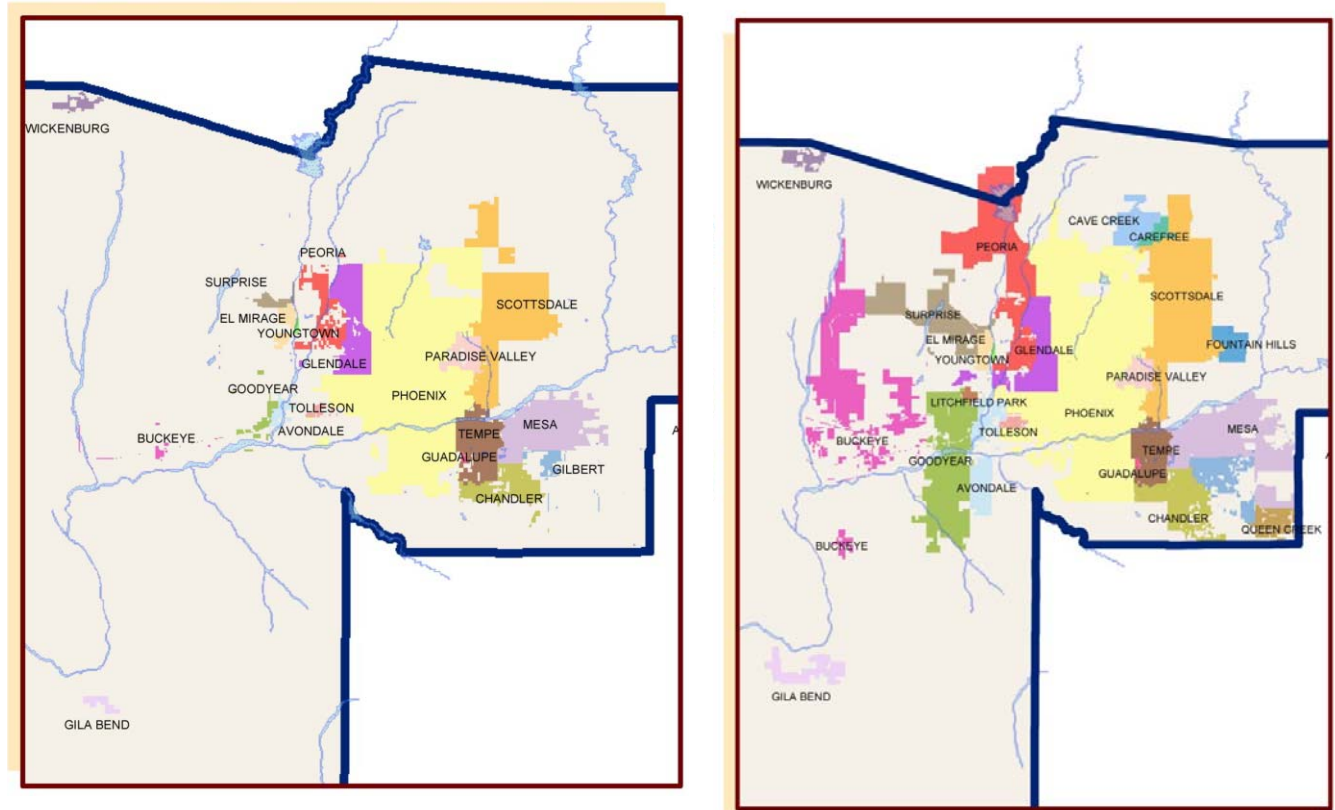


Republic map by Kearney Ecarton

The strip of land annexed by the Gilbert City Council is represented by the dark line. The strip encompasses 51 square miles.

SOURCE: *Arizona Republic*, January 19, 1975, B6. Used with permission. Permission does not imply endorsement. azcentral.com

FIGURE 5
Annexation by Maricopa County Cities and Towns, 1980-2000



1980

2000

SOURCE: Maps taken from “City Growth Time Line,” Maricopa County Planning and Development Department, Phoenix, Arizona.

TABLE 1
Land Area of Cities and Towns in Maricopa County, 1950-2005
(Square Miles)

<i>Cities and Towns</i>	<i>1950</i>	<i>1960</i>	<i>1970</i>	<i>1980</i>	<i>1990</i>	<i>2000</i>	<i>2005</i>
Avondale	0.54	1.10	2.26	5.08	22.01	40.62	43.80
Buckeye	0.83	0.83	1.07	2.13	14.51	126.82	230.79
Carefree					8.80	8.81	8.81
Cave Creek					22.60	27.89	28.65
Chandler	0.68	2.89	4.11	23.63	47.84	52.94	63.49
El Mirage		0.22	2.13	7.60	9.92	9.92	9.88
Fountain Hills					16.67	18.23	18.26
Gila Bend			2.87	2.87	8.66	22.43	37.87
Gilbert	0.97	0.97	0.97	6.72	27.28	35.29	57.28
Glendale	1.27	3.66	15.23	39.45	50.30	54.34	57.01
Goodyear	0.31	0.45	1.02	5.91	113.85	115.37	118.42
Guadalupe				0.75	0.75	0.82	0.80
Litchfield Park					2.30	2.97	3.21
Mesa	5.82	13.77	19.70	65.38	113.20	124.38	131.07
Paradise Valley			13.40	13.60	15.23	15.40	15.39
Peoria		1.08	3.72	21.85	60.72	140.68	177.58
Phoenix	16.09	110.95	245.50	321.03	420.36	475.15	515.10
Queen Creek					10.14	22.22	26.08
Scottsdale		3.38	61.34	107.08	182.36	183.19	184.43
Surprise			1.06	1.47	60.30	67.70	76.35
Tempe	2.19	13.09	24.61	37.98	39.64	39.88	40.09
Tolleson	0.47	0.51	0.58	1.68	4.24	4.91	5.11
Wickenburg	1.02	1.33	3.43	6.10	10.93	11.39	14.80
Youngtown			0.96	1.00	1.25	1.30	1.51

SOURCE: Data provided by Maricopa County Planning and Development Department.

TABLE 2
Sales Taxes as a Share of Revenue
(Percent)

<i>Fiscal Year</i>	<i>Phoenix</i>	<i>All U.S. Municipalities</i>
<i>Share of General Revenue From Own Sources</i>		
1969-70	41.62	12.94
1979-80	38.80	17.18
1989-90	28.66	16.98
1999-2000	34.44	NA
2001-02	37.24	17.69
<i>Share of General Revenue</i>		
1969-70	30.82	9.10
1979-80	21.01	10.79
1989-90	19.28	12.12
1999-2000	22.96	NA
2001-02	24.11	12.41

NOTE: Sales taxes in this table include general and selective sales taxes that are part of general revenue from own sources. General revenue from own sources (which also includes other taxes, current charges for commodities and services other than liquor store sales, and miscellaneous revenue) is one of two categories that make up general revenue; the other is intergovernmental revenue.

SOURCES: U.S. Census Bureau, *City Government Finances in 1969-70*, Series GF 70-No. 4 (Washington, D.C.: U.S. Government Printing Office [henceforth, GPO], 1971), table 3, p. 7, table 5, p. 9; idem, *City Government Finances in 1979-80*, Series GF 80, No. 4 (Washington, D.C.: GPO, 1981), table 3, p. 10, table 5, p. 13; idem, *City Government Finances: 1989-90*, Series GF/90-4 (Washington, D.C.: GPO, 1991), table 3, p. 4, table 5, p. 7; idem, *Government Finances 1999-2000* (January 2003), table 4, p. 130, <http://ftp2.census.gov/govs/estimate/00allpub.pdf>; U.S. Census Bureau, *City_Govt_Fin.zip*, <http://www2.census.gov/pub/outgoing/govs/special60> (for Phoenix in 2001-02); U.S. Census Bureau, *2002 Census of Governments*, State and Local Government Finances, table 2, <http://ftp2.census.gov/govs/estimate/02slsstab2a.xls> (for all U.S. municipalities in 2001-02).