



Unweaving a Tangled Web

Local Trends and Regional Challenges in Allegheny County

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Allegheny County is under stress. Over the past several decades, it has lagged the nation in creation of jobs and growth of regional exports, has seen the flight of young professionals from the region, and has been unable to attract immigrants. These events have contributed to its severe economic problems, including job losses, a declining and aging population, and few prospects of an economic upturn. These problems afflict most of the 130 municipalities that make up the county, and in particular they affect the largest one, the City of Pittsburgh. Two issues that cities and towns in Allegheny County are struggling to manage are taxation and economic development—namely creation and retention of jobs. To help understand these issues, the Program on Economic Opportunity at the Heinz Foundation asked RAND to explore the degree and nature of economic interdependence in the county. The goal is to develop a clear understanding of the economic relationships among the county’s cities and towns to inform decisions about taxation and economic development. The results of the RAND analysis appear in *Measuring and Understanding Economic Interdependence in Allegheny County*.

What The Study Did

RAND researchers set out to determine how money in the form of earned income flows across the county. They did so by comparing where people earned their money with where they lived. The two possible working situations generate three types of earnings. People can either work where they live, or they can live in one place and work in another. Those who live and work in the same place generate what the researchers called domestic earnings. If they work somewhere else and bring their paychecks home, that is called imported earnings. And those same earnings are exported earnings from the perspective of the municipality that houses the job.

Key findings

- The economies of Pittsburgh and other communities in Allegheny County depend on each other, especially from an employment perspective.
- On average, only 13 percent of the residents work in the same town where they live.
- For 114 municipalities in the county, 80 cents of every dollar earned comes from other locales.
- Pittsburgh is the economic engine of the region, contributing over 30 percent of the earnings of people in about half of the county’s municipalities.
- Communities can benefit if they work together to bring jobs into the county rather than compete with each other for those jobs.

Using these three types of earnings, RAND researchers created two measures that enabled them to calculate economic interrelationships. One showed the extent to which a locale was a source of income for other communities in the county. A second measure showed the extent to which a community depends on out-of-town income. These are called exported and imported earnings ratios, respectively.

Study Highlights

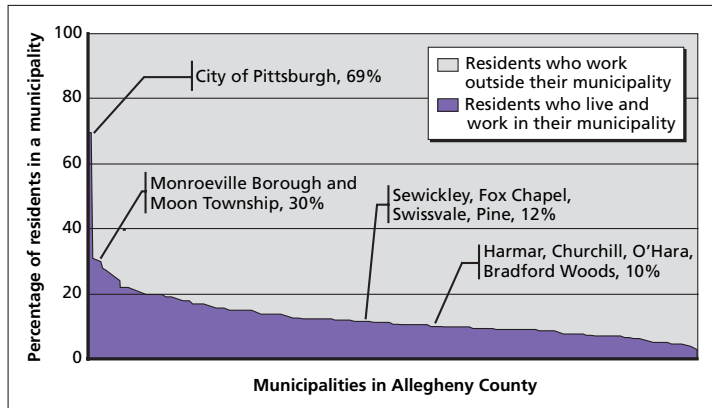
One thing the researchers discovered was that most people work someplace other than where they live. Figure 1 shows the proportion of residents in each municipality in Allegheny County who live and work in their own town (who account for domestic earnings) and residents of the municipality who work somewhere else (the workers who account for imported earnings).

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Corporate Headquarters
1776 Main Street
P.O. Box 2138
Santa Monica, California
90407-2138
TEL 310.393.0411
FAX 310.393.4818

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Figure 1
Most Residents Work Outside Their Municipalities



On average, only 13 percent of residents work in their own municipality. Put another way, over 85 percent of workers in Allegheny County commute to work outside of their municipality. Of the 130 municipalities, the City of Pittsburgh is at the high end of the scale, with 69 percent of its residents living and working within its boundaries.¹ Moon Township and Monroeville Borough have the next highest proportion of domestic workers, with 30 percent of their residents working in their municipalities.

The RAND research highlighted other critical issues. Some municipalities export more income to other areas than their residents import, meaning more earnings leave the municipality than their residents bring in from other locales, i.e., they are net exporters of earnings. The five largest of these include Pittsburgh, Monroeville, Findlay, Robinson, and Green Tree.² Other municipalities export less income than they capture, which means that residents bring in more earnings from jobs in other areas than the earnings that non-resident workers take out of that municipality. Examples of these municipalities include Mount Lebanon, Penn Hills, Shaler, and Upper St. Clair.³ These municipalities are net importers of earnings.

In some cases, the disparities can be quite large. Ten municipalities export more than \$100 million. That is, people who work in these locations take \$100 million to another place. Fifteen municipalities benefit from this exported income, which is in the form of net imported income to them of more than \$100 million annually. Not surprisingly, the City of Pittsburgh is the largest exporter of aggregate earnings to other areas after subtracting the imported earnings of its residents, yielding a net estimated earnings deficit of over \$5 billion.

One way to understand the economic interdependency of a region is to calculate the earnings ratios mentioned above. These ratios indicate the degree of economic interdependence between

two municipalities. Results show that 114 locales have imported ratios of over 80 percent or higher, which means that for every dollar a municipal resident earns, at least 80 cents comes from jobs outside its boundaries. This indicates a high degree of economic interdependence among jurisdictions. Pittsburgh is again the anomaly, with an imported ratio of about 30 percent, indicating that many residents earn their income inside the city, or that about 70 cents of every dollar earned by city residents comes from jobs from within the city's boundaries. However, as stated above, Pittsburgh exports an enormous amount of income, accounting for more than one-third of all the exported earnings to the 130 municipalities combined. Figure 2 provides a picture of the imported earnings ratios by municipality within the county. Here, dark gray indicates ratios of 91 percent or higher; lighter shades of gray indicate ratios between 71 and 90 percent; the white shows the City of Pittsburgh, the only ratio 70 percent or less, with an imported earnings ratio of 30 percent. Exported earnings ratios in the county also are high, with 124 municipalities having ratios over 60 percent, meaning that at least 60 cents of every dollar of earnings generated by jobs within these jurisdictions leaves their boundaries. The picture is clear: Allegheny County municipalities are economically interdependent based on earnings.

The RAND research next examined how jurisdictions are interconnected to the City of Pittsburgh by looking at how income from the city flows into the surrounding area. Figure 3 provides a stylized picture to illustrate the degree of economic independence between four municipalities and the City of Pittsburgh. The large arrows show income earned in Pittsburgh and taken home, and the small arrows show income flowing from other locales to Pittsburgh. The figure shows that some locations depend heavily on income generated outside their boundaries. Fox Chapel residents, for example, earn more than 50 percent of their earned income from working in Pittsburgh. In all, nearly half of the municipalities in Allegheny County rely on earnings from jobs in Pittsburgh for at least 30 percent of all earnings by their residents, and at least 15 percent of total earnings for more than 90 percent of the municipalities in the county. This means that jobs in Pittsburgh alone provide the equivalent of 15 cents (or more) out of every dollar earned by residents in these municipalities.

Implications of the Findings

A key conclusion of this study is that the municipalities of Allegheny County have a high level of economic interdependence, with more than 80 percent of all earnings on average leaving or entering county jurisdictions. This interdependence means that the economic fate of one municipality inextricably links to that of many others. As locales compete for jobs or residents within the county, dependencies may shift but probably only to a limited extent. Indeed, done haphazardly, such competition might resize the slices of the pie but would not increase its overall size. The economic effect could be negative if municipalities use scarce resources to compete for nearby jobs.

Because the municipalities rely on their own tax base to provide services to their residents, they have a motivation to engage in

¹ It is important to note that, in general, the larger the geographical or population area, the smaller the percentage of workers who commute elsewhere to work.

² The City of Pittsburgh has estimated net exported earnings of more than \$5 billion, and the other four municipalities have net exported earnings between \$300 million and \$350 million.

³ Each of these municipalities has net imported earnings estimated between \$250 million and \$350 million.

this competition. But the larger question is whether such competition benefits the region as a whole. This is not an idle question, because, as the analysis done for this study shows, the region is highly interdependent. The question becomes particularly acute for Pittsburgh, which is the major economic engine in the region. If the surrounding municipalities took actions to boost their own economic fortunes but in doing so made Pittsburgh less attractive for employers, the end result could hurt the greater region economically. A tactical victory could ultimately become a strategic defeat.

The 130 municipalities in Allegheny County are deeply integrated economically, at least in terms of individual earnings, indicating that the county is a

Figure 2
Imported Earnings Ratios by Municipality

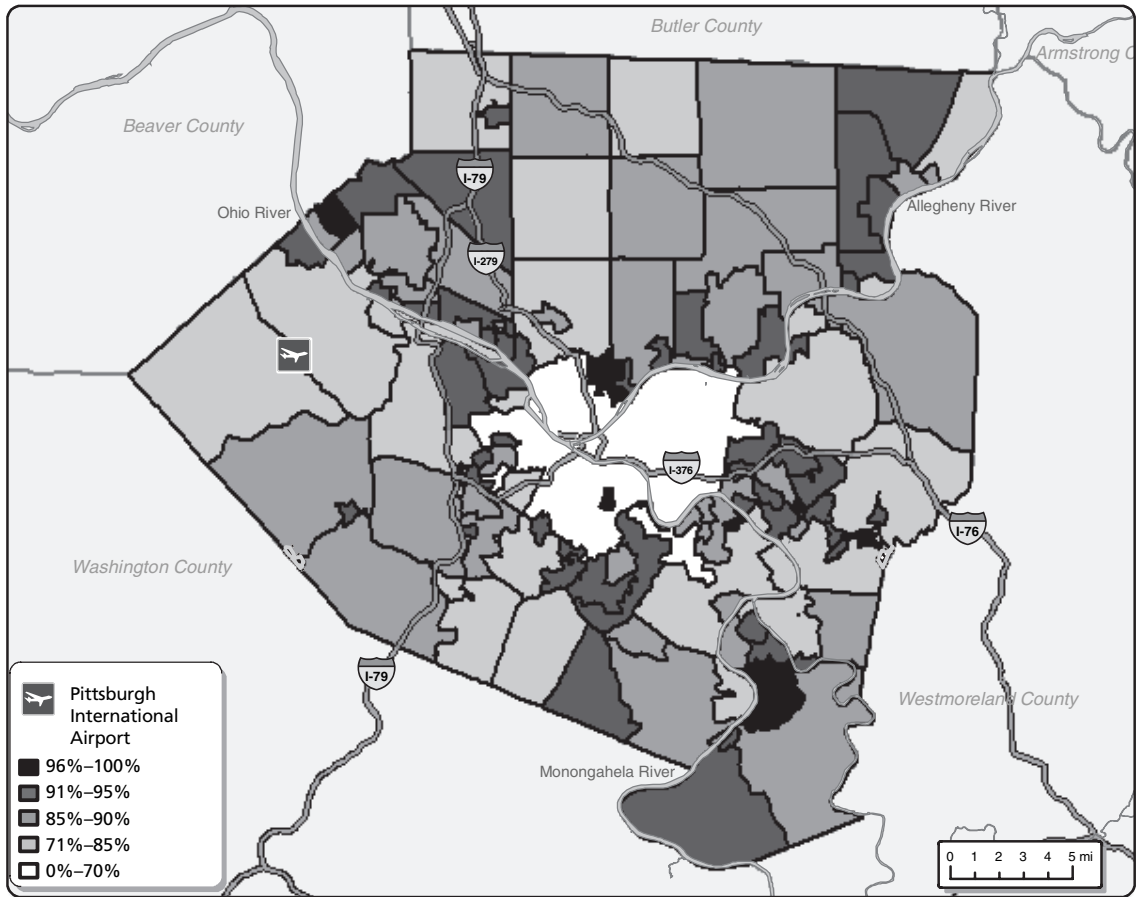
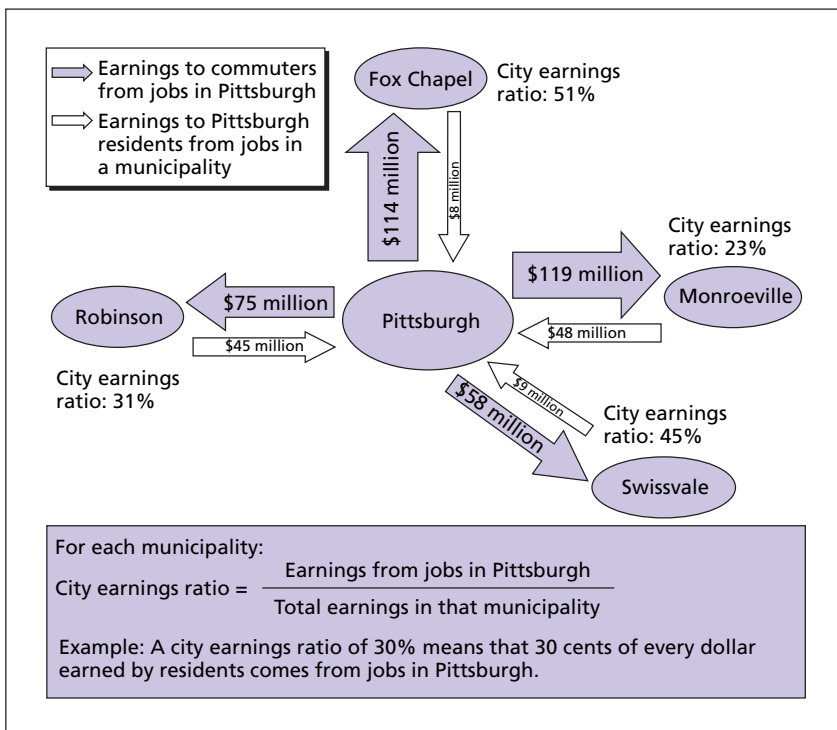


Figure 3
Examples of Imported Earnings Ratios



single “region” for employment. This situation raises a number of policy issues. The discussions currently under way about Pittsburgh–Allegheny County consolidation center on how to think and act more regionally to lessen inefficiencies and inequities caused by multiple layers of government. This same discussion can be extended to the other 129 municipalities and the many additional governance structures within the county. People choose where to live in the county based on such factors as distance to work, transportation systems, schools, housing costs, and services. What model of regional planning and governance offers the best balance for individual preferences inside a regional economy? Which functions and services are local, with decisionmaking at a jurisdictional level, and which are regional, with decisionmaking at a common level? As the center of the dense web of economic flows in the county, does Pittsburgh deserve special consideration to ensure its viability as an economic hub for the region?

Policymakers will need to consider these and many other questions. This report makes it clear that whatever the decisions, they must be made against the backdrop of the economic interconnections of the region. ■

This research brief describes work done for RAND Infrastructure, Safety, and Environment documented in *Measuring and Understanding Economic Interdependence in Allegheny County*, by Sally Sleeper, Henry Willis, Eric Landree, and Beth Grill, TR-200-HE (available at <http://www.rand.org/publications/TR/TR200/>), 2005, 27 pp., \$15, ISBN: 0-8330-3709-9. TR-200 is also available from RAND Distribution Services (phone: 310.451.7002; toll free: 877.584.8642; or email: order@rand.org). The RAND Corporation is a nonprofit research organization providing objective analysis and effective solutions that address the challenges facing the public and private sectors around the world. RAND's publications do not necessarily reflect the opinions of its research clients and sponsors. **RAND**® is a registered trademark.

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