Connecting People and Jobs

A Look at Workers and Jobs in the Pittsburgh Region

Systems Synthesis Project
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**EXECUTIVE SUMMARY**

This report looks at the patterns of new economic development in the Pittsburgh area. Development is taking place in the growing suburban areas rather than in the historical urban and business centers as well as far from people most in need of employment. Challenges for workers trying to gain access to new employment centers in the suburbs are borne out in public transportation patterns, housing costs near new development sites, and the enlarged geographic separation between unemployed workers and new commercial development sites.

We selected the Airport Corridor for in-depth analysis of these challenges. This region, defined to include suburban communities contiguous with the Pittsburgh International Airport, is one of the few in the Pittsburgh MSA experiencing population and job growth. Since the airport was opened in 1992, a great deal of public and private investment has gone to nearby communities.

Our analysis of the Airport Corridor closely examines employment, transportation and housing data from the area of study in context of the region. We selected two existing economic development sites and researched their background and current state to garner lessons learned and support for the quantitative analysis. We looked at criteria for Pennsylvania programs providing public funds to economic development projects and detailed three of these programs that have resulted in investment in the Airport Corridor. Finally, we looked at planned economic development for the Airport Corridor.

Key findings:

- The Airport Corridor is a growing employment center in the Pittsburgh region.
- The unemployed are located in the southeast of the Pittsburgh MSA, far from the new jobs created in the Airport Corridor to the northwest of Pittsburgh.
- Most of the new jobs that are drawing outside commuters to the Airport Corridor are paying low wages.
- Public transit is underutilized in the Airport Corridor.
- There is a lack of transparency in the process of awarding public subsidies to companies and little to no accountability if the companies do not produce the number or type of jobs promised.

Recommendations:

- Support fiscal accountability legislation for the state and county that would make the process of granting public subsidies transparent. This legislation could require companies to return portions of subsidies if they do not achieve predetermined results, or offer incentives in the case of superior performance/job creation.
- Strengthen the availability and timeliness of public transit in the Airport Corridor and other growing suburban areas to lessen the costs of commuting that are disproportionately carried by low-paid workers.
Acknowledgements:

We would like to extend our appreciation to our advisory board, the Carnegie Mellon faculty and staff, specifically our project advisory Dr. Jerry Paytas, and our client Court Gould of Sustainable Pittsburgh. Your help and guidance has made this report possible. We are also particularly thankful for the input provided to us by Lynn Manion of the Airport Corridor Transportation Association, and Dewitt Peart of the Allegheny Conference on Community Development.

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**Introduction**

The initial inspiration for this project, "Connecting People and Jobs: a Look at Workers and Jobs in the Pittsburgh Region," originated from a report published by the Three Rivers Workforce Investment Board entitled *Job Access in the Cranberry Area.* The goal of this project is to determine whether the findings from that report apply to Pittsburgh's other suburban regions.

Public transportation has traditionally served suburban workers commuting into the urban core where jobs were concentrated in the past. As economic development spreads to suburban regions while urban regions continue to decline, low-income workers who typically reside in urban areas and are more dependent on public transit face greater challenges in accessing job opportunities.

*Job Access in the Cranberry Area* found that people seeking to obtain and keep jobs in Cranberry, a suburb of Pittsburgh, face formidable transportation barriers. Cranberry is highly car dependent, with limited public transit and little infrastructure to serve pedestrians. Cranberry is also known for its relatively high housing costs and scarce affordable housing options. Together, these forces create a “spatial mismatch” between workers who are dependent on public transportation and suburban jobs. The *Job Access in the Cranberry Area* report provides a useful framework for our analysis.

After seeking advice from our advisory board and looking at summary data on employment, we selected the Airport Corridor as our area of study. Over the past decade the Airport Corridor has seen population and job growth while much of the Pittsburgh MSA has lost residents and jobs. There has been a great deal of public and private money invested in the Airport Corridor and much is planned for future development. Research with the Allegheny Conference on Community Development identified five current projects planned for the Airport Corridor that are expected to yield up to 37,600 jobs. In addition, the Southwestern Pennsylvania Commission has identified nine projects in the Airport Corridor. Covering more than 1,800 acres, these projects will generate more than 27,000 jobs and require more than $1.8 billion in total public and private investment.

We defined the Airport Corridor as consisting of eight municipalities surrounding the Pittsburgh International Airport. These municipalities are located in Allegheny, Beaver and Washington County. They include Coraopolis Borough, Crescent Township, Findlay Township, Independence Township, Moon Township, North Fayette Township, Robinson Township in Allegheny County, and Robinson Township in Washington County.

Our analysis of the Airport Corridor included comparing employment, transportation and housing data from our area of study with the Pittsburgh Metropolitan Statistical area. We also selected two existing economic development sites, Robinson Town Centre and Southpointe, and researched the background and the current state of the development of these sites to garner lessons learned that could add insight to the quantitative data analysis of the area. We looked at state criteria for programs providing public funds to economic development projects and detailed three of these programs that have resulted in investment in the Airport Corridor. Finally, we looked at planned economic development for the Airport Corridor.

The following questions guided our research:

- Where do the workers filling Airport Corridor jobs come from?
- Which industries draw workers to the Airport Corridor?
- What is the regional commuting profile of the Airport Corridor?
- What are the costs of commuting?
- What public transportation infrastructure exists in the Corridor, and is this accessible to workers?
- What are the costs of housing in the Airport Corridor for both private and public residences?
- What is the Airport Corridor’s stock of public housing, and what are the eligibility requirements?

Our findings show that current methods of land use and economic development planning do not take into account important factors that affect the success and cost of development. New development is being located in suburban regions without regard for the costs workers pay in time spent commuting when public transit is an option, or in operating a private vehicle. Employers also bear a cost when they are unable to access labor or when they experience attrition, tardiness or absenteeism due to the challenges their workers face getting to work.
**Recommendations**

We concentrate on two specific recommendations that are realistic and achievable. The first recommendation is to increase the availability, affordability and timeliness of transportation options. To accomplish this, many options can be considered, but we focus on ride-sharing programs since they can be implemented with the least capital investment and with the most immediate impact.

Why focus on transportation? The problem of unemployed or underemployed workers not being able to access new jobs due to geographic distance can only be solved in three ways: bringing the workers to the development sites by providing affordable housing, creating new jobs where the workers are located, and providing transportation that allows the workers an affordable commute from where they already live to the areas of job growth. Creating affordable housing in the suburban areas where new economic development is located is not likely to happen due to the objections of current residents living in those communities and the high cost of building and subsidizing housing for low-wage workers. Motivating businesses to locate near low-wage labor supply is difficult due to the often negative outsider perceptions of the communities where that labor is located and the lower development costs in Greenfield suburban areas. Suburban areas also allow businesses access to a more affluent consumer base. Improving transportation is left as the option with the least amount of opposition and the greatest short-term impact.

The second recommendation is to develop state and local legislation that encourages fiscal accountability and transparency in the public subsidy process. Companies that receive public subsidies to attract them to a region should be required to release all information regarding the subsidy and to track their job creation performance. The process by which local government authorities allocate subsidies needs to be open to public scrutiny to ensure that these funds are used responsibly.

### Transportation

Based on our analysis of the transportation system in the Airport Corridor (see pg. 16 for the findings from our analysis) we examined selected recommendations from the Multimodal Airport Corridor Project, and have devised specific prescriptive advice for which action should be taken.

**Evaluation of Transportation Alternatives: few immediate benefits, high outcome uncertainty**

<table>
<thead>
<tr>
<th>Alternative</th>
<th>Costs / Financing</th>
<th>Horizon</th>
<th>Benefit Estimate (incremental / year)</th>
<th>Other benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ride sharing programs</td>
<td>• Ad campaign&lt;br&gt;• Incentives (lanes, reimbursements)</td>
<td>3 months</td>
<td>• $2.9m to $4.6m (1 in 100 POVs rideshare)&lt;br&gt;• Reduced congestion&lt;br&gt;• Higher transit utilities.</td>
<td>• Expanded connections&lt;br&gt;• Improve reliability&lt;br&gt;• Reduced congestion&lt;br&gt;• Community development</td>
</tr>
<tr>
<td>Expand bus coverage: more routes, stops, buses</td>
<td>• Add 1 labor hours, equipment&lt;br&gt;• Planning costs&lt;br&gt;• FTA/JARC</td>
<td>6 to 18 months</td>
<td>• $3.7m benefit (5% bus users)&lt;br&gt;• $12.4m benefit (10% bus users)&lt;br&gt;• Reduced congestion&lt;br&gt;• Higher transit utilities.</td>
<td>• Expanded connections&lt;br&gt;• Improve reliability&lt;br&gt;• Reduced congestion</td>
</tr>
<tr>
<td>Multimodality / Park and Ride</td>
<td>• Right of way&lt;br&gt;• transit interconnect</td>
<td>1 to 2 years</td>
<td>• $(300K) to $1m (must save time to produce positive results)&lt;br&gt;• Reduce congestion&lt;br&gt;• Higher transit utilities.</td>
<td></td>
</tr>
<tr>
<td>Intelligent Transport System</td>
<td>• High hardware, software, and communications expenses</td>
<td>2 to 5 years</td>
<td>• $1m time savings (5 mins / commute)&lt;br&gt;• Improve reliability&lt;br&gt;• Shorter travel times&lt;br&gt;• Resource optimization</td>
<td></td>
</tr>
<tr>
<td>Maglev / Light Rail to Airport</td>
<td>• High upfront cost, long disruption&lt;br&gt;• FTA funding avail.</td>
<td>5 to 15 years</td>
<td>• Rider breakeven at 1 in 5 area workers for next 50 years*&lt;br&gt;• Reduced congestion&lt;br&gt;• Shorter travel time</td>
<td></td>
</tr>
</tbody>
</table>

Table 1: Transportation Policy Alternatives
Our evaluative framework looks at qualitative information including the direct program costs and potential funding sources, the implementation horizon, and benefits. Using our cost model we have also estimated the incremental transportation benefits under modest program scenarios, as follows:

**Ride-sharing:** these programs offer large potential benefits but face substantial obstacles in effecting commuting patterns since people prize independence and personal mobility. However, should only 1-in-100 private owned vehicle (POV) commuters participate in ride sharing there could be as much as a $4.6 million benefit to the area.

**Increasing bus rider-ship:** if the Port Authority of Allegheny County (PAT) can increase bus ridership to national levels by expanding service or improving the use of existing resources this could offer net positive benefits of close to $4 million per year. By raising transit utilization to 5 or even 10 percent, well within the existing system capacity, the area could generate substantial social savings.

**Multimodal projects** such as park-and-ride lots will only generate positive net benefits if they can decrease commute times. Given the observed commute times for transit riders in the region, this would need to be accompanied by improving bus coverage and routing. This represents a formidable challenge given the disparity in commute times between transit and POV commuters.

**Other:** The final two alternatives, Intelligent Transport Systems and Light Rail, represent longer solutions for which benefits are difficult to assess—they will not be discussed in this paper.

**Ride-sharing: a closer look.**

Given the near-term horizon of program impact and potential benefits of ride sharing, we decided to examine this alternative in greater detail and provide specific advice for implementing such a program.

**Cost simulation:** if one in one hundred POV commuters were to participate in ride sharing, we would net benefits in reduced variable costs of cars, a decrease in parking demands and reduced social cost by decreasing aggregate miles traveled in the area.

There are several different ways to implement ride sharing programs that can be implemented separately or in concert:

**Information campaign:** With such programs the goal is to convince people of the user benefits of ride-sharing which include reduced costs of parking and variable costs of car ownership, special parking set aside for multi-occupant commuter vehicles, a faster or less stressful commute, shared sense of community, and the ability to rest or work while someone else drives. Methods of disseminating information range from informational websites to purchasing media time on local radio or television markets. Target audiences include regional commuters and enterprises, but programs that work in conjunction with local companies are likely to be most effective. Because the outcome of such programs is difficult to track, we do not recommend this approach unless tightly coupled with corporate programs.

**Matchmaking:** By developing a formal system to make ride sharing more accessible—such as an online matchmaking service—opportunities to ride-share will be made simpler and more transparent to commuters. This can be executed in a variety of ways such as company intranets and local government websites. Currently the Southwestern Pennsylvania Commission provides a website describing their free matchmaking service for regional commuters: http://www.commuteinfo.org/comm.shtml. PAT and county authorities could develop a parallel system for the entire region and syndicate the capability via different channels at a low cost to increase reach and targeting effectiveness. This represents a large scale endeavor for which the entire region can benefit.

**Van-pooling:** A number of van-pooling options exist in Pittsburgh: for example, the University of Pittsburgh operates a van service for commuters into Oakland. Van pooling provides a quasi-public transportation mode that combines the benefits of aggregating riders while avoiding the pitfalls of fixed route transit. This represents an entrepreneurial opportunity which the local government has yet to support in a meaningful manner. The Airport Corridor Transportation Association already promotes van-pooling and ride sharing through their web site: http://www.actapgh.org/comminfo.html#search. We recommend exploring opportunities to increase the availability of this option in the Airport Corridor and to expand the base of people using already available services.

### Transportation Cost Reduction

<table>
<thead>
<tr>
<th>Benefit: cost reduction</th>
<th>MEAN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduction in parking</td>
<td>$776,955.45</td>
</tr>
<tr>
<td>($200 per POV commuter/m)</td>
<td></td>
</tr>
<tr>
<td>User Cost - variable</td>
<td>$153,810.83</td>
</tr>
<tr>
<td>(Assumes ride shares still own car)</td>
<td></td>
</tr>
<tr>
<td>Government (based on PMT)</td>
<td>$212,771.65</td>
</tr>
<tr>
<td>Environment (based on PMT)</td>
<td>$92,286.50</td>
</tr>
<tr>
<td>Social (based on PMT)</td>
<td>$1,539,433.64</td>
</tr>
<tr>
<td></td>
<td>$1,009,799</td>
</tr>
<tr>
<td></td>
<td>$2,069,069</td>
</tr>
<tr>
<td>TOTAL</td>
<td>$2,775,258.08</td>
</tr>
<tr>
<td></td>
<td>$2,245,623.07</td>
</tr>
<tr>
<td></td>
<td>$3,304,893.10</td>
</tr>
</tbody>
</table>

Table 2: Transportation Cost Reduction 

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Carnegie Mellon University
High occupancy vehicle (HOV) lanes: By providing preferential treatment for multi-occupancy vehicles with respect to lane access, ride sharing becomes an increasingly desirable alternative. This has worked particularly well in the San Francisco Bay Area, where congestion is a serious problem. HOV lanes have led to the creation of an informal program with centralized drop-off and pick-up points. The Pittsburgh area has implemented HOV lanes on Interstate 279 connecting communities north of the city with downtown Pittsburgh. Because of the planning and potential modifications required to implement HOV lanes in the Airport Corridor to accommodate changes in traffic flow we recommend only that analysis be conducted to better understand the associated costs.

Fiscal Accountability and Economic Development Subsidies

To ensure transparency and accountability in the use of public development funding, we recommend that Pennsylvania enforce reporting requirements for all companies receiving public economic development funds. When public funding is used for economic development, there must be public access to information. Without information disclosure requirements and holding companies accountable for promises they make regarding job projections in order to receive public money, there is no way to determine if development funds have been used appropriately and effectively. Details of economic development deals should be tracked before, during and after the deal between private industry and public officials is made. Companies receiving public subsidies should be monitored annually. All reported information related to economic development funding should be made public.

To provide a legislative basis for this practice, we recommend a comprehensive disclosure law (based on guidelines from Good Jobs First) for Pennsylvania that:

- covers all state, regional and local development agencies;
- gives the public access to information both before and after a deal is negotiated; and
- provides for annual, company-specific, deal-specific, publicly-available reports on subsidies which summarize the original deal (costs) and then track actual outcomes (benefits), not projections.

One problem that we experienced in researching this project is that much of the data that would have been helpful in our analysis was not available to the public, and may not even be collected or tracked. Although Southpointe and Robinson Town Centre both received public economic development funding, we were unable to find out exactly how much, and whether there were job creation requirements as part of the subsidy, or whether these developments have created the jobs that they were intended to create. When projects are funded by taxpayer money, this information should be available, and this is of increased importance in Pennsylvania, which ranks fifth in per capita economic development spending with questionable results.7

Establishment-level data should be tracked by all companies that receive subsidies as a part of the deal, and collected and made public by the Pennsylvania Department of Community and Economic Development. In the case of failure to collect or report required information, fines should be imposed. Pennsylvania DCED should also make public all information about the economic development deal-making process, including company applications that do not receive subsidies. This additional reporting and information collection could be funded by the current state economic development budget (which ranks quite high compared to other states). Ideally, transparency of information will lead to better economic development decisions, creating more and better jobs throughout the state. These jobs will bring more taxes to the state government, which could continue to fund the collection of information.

There is no comprehensive model available for how to enact fiscal accountability measures for public subsidies. Most states do not have mechanisms in place that track annual performance of companies receiving economic development assistance. Only Minnesota and Maine have legislation requiring annual reporting by companies receiving subsidies. Illinois has also enacted corporate accountability legislation.

- Minnesota: Minnesota includes specific data on costs and benefits, including type of subsidy and its value, the number of jobs created, wages, and benefits, as well as other public purposes served by the deal, such as pollution control. 8

- Maine: The Maine Legislature mandates job creation and wage and benefit goals along with monitoring and reporting. Companies that do not file their subsidy disclosure reports can lose their Business Equipment Tax Reimbursement (BETR). 9

- Illinois: Illinois enacted a corporate accountability law in 2003 that tracks “all state subsidies, mandates, extensive disclosure in applications for economic assistance, requires annual progress reports from companies that receive assistance, and provides for recapture of tax credits from corporations that do not meet their obligations.”10

In the states where economic development subsidies are disclosed and company performance is monitored, deals have been discovered in which...
subsidies exceed $100,000 per job created.\footnote{11} This type of information helps public leaders determine whether subsidies have been cost-effective in the past, and help create an atmosphere of more responsible use of subsidies to attract business development in the future.

**DATA ANALYSIS AND METHODOLOGY**

Defining the Airport Corridor Study Area

After selecting the Airport Corridor as our area of focus for this project, the next step was defining the study area. Because we used a variety of datasets in this project, some defined by zip code and some defined by municipality, we needed to create study areas defined by both units of geography. We did this by selecting all municipalities and zip codes that bordered on the property owned by the Pittsburgh International Airport and that would include neighboring Beaver and Washington counties. The maps of our study area are included below.

Employment Analysis

In a city that is losing population and a region that is growing at a rate well below the national average, it is important to focus on and study local employment centers that are experiencing growth. Within the Pittsburgh region, one of the geographic areas that has gained jobs in recent years and has become a substantial employment center is the Airport Corridor.

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**Focus Area Defined by Municipality**

**Focus Area Defined by Zip Code**

![Figure 1: Focus Area](image-url)
The zip code 15108 (which surrounds the airport) gained more jobs between 1994 and 2001 than any other zip code in the region except for Oakland (15213) and Cranberry (16066), and was one of only four zip codes to gain more than 5,000 jobs over the period.12

Only four zip codes gained more than 5,000 jobs between 1994 and 2001.

The Airport Corridor has many more jobs than people. In the Pittsburgh MSA, the jobs to labor force ratio is 0.94, while in the Airport Corridor the ratio is 1.86. This means that in Pittsburgh, there is about one job to every resident, while in the Airport Corridor there are almost two jobs to each resident. Because of the excess jobs, a substantial number of workers will have to commute from outside of the Airport Corridor to fill these openings.

There has been a great deal of growth in the Airport Corridor, although some jobs were lost in the recent economic downturn. In total, the area gained 6,489 jobs between 1994 and 2002, the most recent year that data is available. This growth represents an increase of 6,489 jobs or 10.9 percent for the period.

Employment in the Airport Corridor has grown.

What types of jobs are located in the Airport Corridor? In order to determine the occupational breakdown of employment in the Airport Corridor, we calculated the industry employment for our study area, and then used an industry-occupation crosswalk16 to estimate occupational employment since occupational employment data is not available at this geographic scale. Our findings regarding the workforce in the Airport Corridor include:

- As expected due to the proximity of the Pittsburgh International Airport, a higher proportion of the workforce in the Airport Corridor holds transportation related occupations than other occupations when compared with the Pittsburgh MSA region as a whole.

The Airport Corridor is a substantial employment center.

<table>
<thead>
<tr>
<th></th>
<th>Total Population</th>
<th>Labor Force</th>
<th>Employment</th>
<th>Jobs/Labor Force Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pittsburgh, MSA</td>
<td>2,358,695</td>
<td>1,142,166</td>
<td>1,077,020</td>
<td>0.94</td>
</tr>
<tr>
<td>Airport Corridor</td>
<td>65,384</td>
<td>35,244</td>
<td>65,595</td>
<td>1.86</td>
</tr>
</tbody>
</table>

Table 3: Employment Figures14
• The Airport Corridor has a high concentration of occupations that pay below the median annual wage for the region.

This area has relatively more workers in Office and Administrative Support, Transportation and Material Moving, Food Preparation and Serving Related, and Personal Care and Service than the Pittsburgh MSA, all of which pay below the regional mean annual wage of $34,490. Management, Education, Training and Library, and Healthcare Practitioners and Technical, all of which pay above the mean annual wage, are underrepresented in the Airport Corridor. Overall, 26 percent of jobs in the Airport Corridor pay less than $20,000, and another 16% pay between $20,000 and $30,000. (See Figure 4 and Table 4)

Figure 4: Low Pay Percentage of Jobs

The Airport Corridor has a high presence of low paying occupations.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Office and Administrative Support</td>
<td>18.63%</td>
<td>18.57%</td>
<td>$25,440</td>
</tr>
<tr>
<td>Transportation and Material Moving</td>
<td>11.51%</td>
<td>7.06%</td>
<td>$29,480</td>
</tr>
<tr>
<td>Sales and Related</td>
<td>9.93%</td>
<td>10.53%</td>
<td>$27,310</td>
</tr>
<tr>
<td>Food Preparation and Serving Related</td>
<td>9.35%</td>
<td>8.57%</td>
<td>$16,420</td>
</tr>
<tr>
<td>Production</td>
<td>7.12%</td>
<td>6.73%</td>
<td>$29,160</td>
</tr>
<tr>
<td>Personal Care and Service</td>
<td>5.39%</td>
<td>2.60%</td>
<td>$20,830</td>
</tr>
<tr>
<td>Installation, Maintenance, and Repair</td>
<td>5.92%</td>
<td>3.92%</td>
<td>$34,630</td>
</tr>
<tr>
<td>Construction and Extraction</td>
<td>5.59%</td>
<td>4.97%</td>
<td>$38,510</td>
</tr>
<tr>
<td>Management</td>
<td>4.94%</td>
<td>6.02%</td>
<td>$74,070</td>
</tr>
<tr>
<td>Education, Training, and Library</td>
<td>3.43%</td>
<td>5.65%</td>
<td>$46,700</td>
</tr>
<tr>
<td>Business and Financial Operations</td>
<td>3.04%</td>
<td>3.32%</td>
<td>$49,160</td>
</tr>
<tr>
<td>Healthcare Practitioners and Technical</td>
<td>2.98%</td>
<td>6.06%</td>
<td>$47,930</td>
</tr>
</tbody>
</table>

Table 4: Airport Corridor Occupations
The Airport Corridor imports workers in lower paying industries.

<table>
<thead>
<tr>
<th>Industries drawing the greatest quantity of workers to the Airport Corridor</th>
<th>Workers (2002)</th>
<th>Residents (2000)</th>
<th>Imported Workers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transportation and Warehousing</td>
<td>13,090</td>
<td>4,802</td>
<td>-8,288</td>
</tr>
<tr>
<td>Accommodation and Food Services</td>
<td>6,400</td>
<td>2,303</td>
<td>-4,097</td>
</tr>
<tr>
<td>Retail Trade</td>
<td>6,695</td>
<td>3,158</td>
<td>-3,537</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>7,232</td>
<td>3,796</td>
<td>-3,436</td>
</tr>
<tr>
<td>Construction</td>
<td>4,827</td>
<td>1,855</td>
<td>-2,972</td>
</tr>
<tr>
<td>Health Care and Social Assistance</td>
<td>5,856</td>
<td>2,889</td>
<td>-2,967</td>
</tr>
<tr>
<td>Wholesale Trade</td>
<td>3,625</td>
<td>1,414</td>
<td>-2,211</td>
</tr>
<tr>
<td>Administrative and Support and Waste Management and Remediation Services</td>
<td>2,687</td>
<td>986</td>
<td>-1,701</td>
</tr>
</tbody>
</table>

Table 6: Airport Corridor Industry Employment

As mentioned above, the Airport Corridor has almost two workers per resident member of the labor force. Subtracting the residents in the Airport Corridor working in an industry from the jobs in the Airport Corridor in the same industry shows which industries are drawing commuters to the Airport Corridor. Table 5 shows industry employment for people who live (residents) and work (workers) in the Airport Corridor. The difference between workers and residents is the minimum number of people that commute to the Airport Corridor to work in a certain industry. A higher number than shown probably commute in as it is unlikely that every single person that lives in the Airport Corridor also works there.

Table 5 shows that Transportation and Warehousing, Accommodation and Food Services, and Retail Trade attract the most workers to the Airport Corridor. These are all lower paying industries, and employees in these occupations face a greater burden when paying the costs of commuting as these are a fixed expense that take up proportionately more of the income of lower-paid workers than workers with higher salaries.

Thousands of workers commute in and out of the Airport Corridor every day. Analysis of commuting data shows that many people do in fact commute into the Airport Corridor. According to census data from 2000, 57,461 people work in the Airport Corridor. Only 25 percent of these workers live in the Airport Corridor; which means that approximately 43,000 people commute in every day. The second most likely place of residence for these workers is the City of Pittsburgh, which is home to 8 percent of the

<table>
<thead>
<tr>
<th>Where Corridor Workers Live</th>
<th>Where Corridor Residents Work</th>
</tr>
</thead>
<tbody>
<tr>
<td>City of Pittsburgh</td>
<td>7.63%</td>
</tr>
<tr>
<td>Airport Corridor</td>
<td>25.01%</td>
</tr>
<tr>
<td>Total Population</td>
<td>Workers: 57,461 Residents: 33,036</td>
</tr>
</tbody>
</table>

Table 5: Airport Corridor Residents Work and Workers Live

Many workers commute in and out of the Airport Corridor every day.

Airport Corridor workforce. The same dataset shows that 33,036 people living in the Airport Corridor. Forty-four percent of Airport Corridor residents also work in the Airport Corridor, but 56 percent work elsewhere. The most common Airport Corridor resident workplace is the City of Pittsburgh, with 20 percent of Airport Corridor residents working in the City of Pittsburgh.

There is a small number of unemployed people living in the Airport Corridor waiting to fill the new and planned jobs coming to the area. Not only does the Airport Corridor have many fewer people than jobs, but it also has a lower unemployment rate than the Pittsburgh MSA. While the 2002 unemployment rate in the Pittsburgh MSA was 5.81 percent, in the Airport Corridor it was 4.83 percent.
Most unemployed people in the Pittsburgh MSA are located in places that are not well connected to the Airport Corridor. The maps below show two representations of unemployment in the Pittsburgh region. The map on the left is the total unemployed population from Census 2000. The highest number of unemployed people is in the City of Pittsburgh, but the surrounding municipalities with higher unemployment tend to be located to the southeast, while the Airport Corridor is in the northwest, and not well connected to the southeast by Pittsburgh’s pinwheel highway infrastructure.

Figure 5 shows the home zip code of all CareerLink applicants that updated their information in 2002. This data shows a more diffuse distribution of people searching for work; however, the data is dependent on the location of CareerLink centers. Areas with CareerLink centers will probably have more applicants than areas without centers. Even so, this map does show a large number of applicants in areas that are not well connected to the Corridor.

Many workers who do live in the Airport Corridor are not suited to fill the openings for lower-paying jobs in the corridor. The median household income of the Airport Corridor ($48,492) is substantially higher than the Pittsburgh MSA ($37,467) average.

There is also a lower percentage of households in the Airport Corridor (Table 6) with no income and households receiving public assistance income in the Airport Corridor than in the Pittsburgh MSA.

Unemployment for the Pittsburgh MSA is not concentrated in the Airport Corridor.

<table>
<thead>
<tr>
<th>Pittsburgh MSA</th>
<th>Airport Corridor</th>
<th>Pittsburgh %</th>
<th>Airport %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Households with no wage/salary income</td>
<td>271,519</td>
<td>4,766</td>
<td>28.08%</td>
</tr>
<tr>
<td>Households with public asst. income</td>
<td>27,911</td>
<td>362</td>
<td>2.89%</td>
</tr>
</tbody>
</table>

Table 7: No Income or Public Assistance Households
Housing Analysis

Because we are interested in housing options available to a worker interested in moving to the Airport Corridor, we analyzed the stock of housing in the Airport Corridor. Examining the housing per capita, rate of occupancy, and percentage of rentals, we found the stock of housing in the Airport Corridor to be similar to national averages as well as that of the Pittsburgh MSA as a whole.

However, the costs differ. Median values of housing values and rental rates show that the Airport Corridor is comparable to those of the nation as a whole. Yet, these values for the Airport Corridor are considerably higher than those of the Pittsburgh MSA. This shows that while renting and owning is comparable to the nation as a whole, the Airport Corridor is more expensive than the Pittsburgh region.

Further investigation confirms that housing values and rental rates, while comparable to the nation as a whole, are much higher than the surrounding Pittsburgh area. When examining the housing values and rental rates by quartiles, though the Airport Corridor values are similar to the national average, we can see that the entire lower quartile of Airport Corridor housing values are above the median housing value of the Pittsburgh MSA. When comparing rental rates of the Corridor, we see that not only the entire lower quartile of rental rates is above the Pittsburgh MSA median, but also that the median rental rate of the Corridor is greater than the entire upper quartile of the Pittsburgh MSA.

<table>
<thead>
<tr>
<th>Housing Stock</th>
<th>Housing Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Housing Per Capita</td>
<td>Rate of Occupancy</td>
</tr>
<tr>
<td>Pittsburgh, MSA</td>
<td>0.44</td>
</tr>
<tr>
<td>Airport Corridor</td>
<td>0.43</td>
</tr>
<tr>
<td>National</td>
<td>0.41</td>
</tr>
</tbody>
</table>

Table 8: Housing Stock and Values

Housing in the Airport Corridor is more expensive than in the Pittsburgh MSA.

Figure 6: Distribution of Housing Values 2000
Public Housing
Low income residents of the Airport Corridor have two main options for public housing assistance:
1. Live in public housing
2. Section 8 vouchers

The Airport Corridor is located within the boundaries of the Beaver, Washington, and Allegheny County housing authorities. However, only Allegheny County has public housing units in the region. The Airport Corridor defined by zip code is home to six public housing sites, all managed by the Allegheny County Housing Authority.31

These six public housing sites create a combined total of only 549 units in the Airport Corridor.
Over the past few years development projects have aimed to reduce the number of units for low income residents. This resulted from the Housing and Urban Development (HUD) Agency’s aim to integrate public housing and to lessen the concentration of low-income residents. In 1998, McKees Rocks Terrace was a 288-unit public housing development located in McKees Rocks Borough, Allegheny County, Pennsylvania. HUD made an award of $15.8 million for a replacement of the McKees Rocks Terrace housing units with a 165-unit medium density public housing site to create a mixed income/mixed financed community, containing both for sale and rental housing. The new development concept incorporates the principles of new urbanism, which seek to integrate the adjacent stable housing stock with a new lower density development. However, it also results in lower numbers of subsidized housing units for lower-income workers.

To be eligible for public housing assistance, families must make below a certain income (see Table 10), and they must pay a rent that is at least 30 percent of their net income or a minimum of $25 per month.

**Public Housing Sites**

<table>
<thead>
<tr>
<th>Site Description</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Ohioview Tower, McKees Rocks, PA 15136</td>
<td>One six-story building of 60 dwelling units</td>
</tr>
<tr>
<td>2 Groveton Village, Coraopolis, PA 15108</td>
<td>24 buildings of 69 dwelling units</td>
</tr>
<tr>
<td>3 Meyers Ridge, McKees Rocks, PA 15136</td>
<td>42 newly constructed townhouses</td>
</tr>
<tr>
<td>4 Ohioview Acre</td>
<td>69 one &amp; two-story buildings of 250 dwelling units</td>
</tr>
<tr>
<td>5 Uansa Village, McKees Rocks, PA 15136</td>
<td>8 two-story buildings of 50 dwelling units</td>
</tr>
<tr>
<td>6 Hays Manor, McKees Rocks, PA 15136</td>
<td>9 building site of 78 dwelling units</td>
</tr>
</tbody>
</table>

**Public Housing Eligibility**

<table>
<thead>
<tr>
<th>Household Size</th>
<th>Maximum Income Limits (annual net income)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$30,850</td>
</tr>
<tr>
<td>2</td>
<td>$35,250</td>
</tr>
<tr>
<td>3</td>
<td>$39,650</td>
</tr>
<tr>
<td>4</td>
<td>$44,100</td>
</tr>
<tr>
<td>5</td>
<td>$47,600</td>
</tr>
<tr>
<td>6</td>
<td>$51,150</td>
</tr>
<tr>
<td>7</td>
<td>$54,650</td>
</tr>
<tr>
<td>8+</td>
<td>$58,200</td>
</tr>
</tbody>
</table>

**Section 8 Voucher Eligibility**

<table>
<thead>
<tr>
<th>Household Size (People)</th>
<th>Maximum Income Limits (annual net income)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$11,550</td>
</tr>
<tr>
<td>2</td>
<td>$13,200</td>
</tr>
<tr>
<td>3</td>
<td>$14,900</td>
</tr>
<tr>
<td>4</td>
<td>$16,500</td>
</tr>
<tr>
<td>5</td>
<td>$17,850</td>
</tr>
<tr>
<td>6</td>
<td>$19,150</td>
</tr>
</tbody>
</table>

**Section 8 Housing Vouchers**

Section 8 Housing Vouchers allow families to pay 30 percent of their adjusted income towards rent and utilities while the housing authority pays the difference to the landlord. The Section 8 Housing Choice Voucher allows flexibility and choice for the very low income residents. To be eligible for participation, an applicant must meet the income guidelines listed above in Table 11.

The housing authority also has restrictions on units eligible to be rented by a Section 8 housing resident. **Table 10** shows the limits on one, two, and three bedroom units. **Table 11** on the next page also shows that few units within the Airport Corridor meet these eligibility requirements when compared to the Pittsburgh MSA as a whole.
Few units in the Airport Corridor meet public housing eligibility requirements.

<table>
<thead>
<tr>
<th>Bedrooms</th>
<th>Rent Limit per month</th>
<th>Eligible units in Airport Corridor</th>
<th>Total units Airport Corridor</th>
<th>Percent units eligible in Airport Corridor</th>
<th>Percent units eligible in Pittsburgh MSA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$511</td>
<td>998</td>
<td>2,170</td>
<td>46%</td>
<td>70%</td>
</tr>
<tr>
<td>2</td>
<td>$615</td>
<td>1,287</td>
<td>2,818</td>
<td>46%</td>
<td>60%</td>
</tr>
<tr>
<td>3</td>
<td>$770</td>
<td>476</td>
<td>1,331</td>
<td>36%</td>
<td>66%</td>
</tr>
</tbody>
</table>

Table 12: Housing that Meets Eligibility

The Airport Corridor has few public housing units. The corridor has 549 units compared to the over 10,000 units in the Pittsburgh MSA. Residents receiving Section 8 vouchers can find few eligible units to rent in comparison to other areas in the Pittsburgh MSA. Public housing in the area is not sufficient to attract low-wage workers to move to the area, even if they could find a vacancy in a public housing unit or a unit that accepts Section 8 vouchers. Housing in the Airport Corridor is prohibitively expensive for the lowest paid workers.

Transportation Analysis

Transportation clearly represents a critical element in connecting workers with jobs. Effective transportation systems can be evaluated along a variety of axes including congestion levels, mortality and morbidity, coverage, and maintenance costs. For the purpose of this study we focused on understanding commuting patterns with particular emphasis on the mix of private occupancy vehicle (POV) and public transit use, the costs associated with these patterns, and the opportunities to improve workplace accessibility. We are particularly interested in the quality of transportation options available to workers from low income households.

Key Questions

- What is the profile of commuting in the Airport Corridor?
- What are the costs associated with this profile?

Key Findings

- Even though there is bus service throughout the Airport Corridor, use of public transit is particularly low: utilization rates are 60 percent of the national average.
- The Airport Corridor has reasonably good transit coverage with 16 bus routes, but commuters face long potential wait times of roughly 38 minutes per trip.
- Commute times are shorter than the national average by 2.3 minutes per traveler.
- Transit commuters face MUCH longer commute times than POV commuters: more than 70 percent of POV commutes take less than 30 minutes while more than 75 percent of transit commutes take more than 45 minutes to get to work.
- There are more than 5,800 off-hour commuters in the area of study with the highest proportion in Moon and North Fayette Townships.
- The total cost of commuting is $500 to $650 million annually in Airport Corridor.

Given that there is bus service throughout the Airport Corridor, the low utilization rate of public transit is troubling. The difference between the percentage of people who use public transit in the city of Pittsburgh and in the Airport Corridor is substantial. This difference is hardly surprising as people in urban centers are afforded better transit coverage and are not subject to the tyranny of distance that is associated with suburban and ex-urban settings. However, when we compare transit use in the Airport Corridor to the national average, a troubling picture emerges. While on average 4.7 percent of the US workforce uses public transit to commute to work, only...
2.6 percent of workers in the Airport Corridor do. This is a significant difference that brings into question whether the transportation system in the area meets national standards of equity, and whether the transit service is sustainable at this level. Given the number of workers in the area, this 2.6 transit utilization rate suggests a commuting population of roughly 1,000 transit riders.

Between the Port Authorities for the three counties in the area of study—Allegheny, Beaver, and Washington counties—there are 16 separate bus lines that run along 6 main bus arteries. Pittsburgh is the common hub for three quarters of these routes, and both the development at Robinson and the Airport itself are important secondary regional hubs. Analysis incorporating scheduled stops and bus capacities indicates a potential system commuter capacity of more than 300,000 passenger boardings. With an average commuter taking trips that include six stops, this implies a system utilization of roughly 10 percent.

It is also worth examining the scheduled frequency of buses within the system to get a sense of wait times. According to our analysis the average scheduled frequency is between 38 minutes per stop (median) and 50 minutes per stop (mean). Long times between stops are not a problem if buses are predictable because riders can minimize wait times by planning when they arrive at the stop. However, the more highly variable the actual arrival of times are from the schedule, the longer the potential wait times a transit rider will face and the greater the additional commuting time required to deal with this uncertainty. In the Airport Corridor there is substantial anecdotal evidence to suggest high schedule variance.

Transportation coverage is good, but a user faces potentially high wait times.
When considering the travel times for both POV and transit riders, commuters in the Airport Corridor face shorter trips on average than the national average by more than 2 minutes—nearly a 10 percent difference. Although that may sound like a trivial amount of time, when considering the monetary value of time 2 minutes in two directions per day for 35,000 people over an entire year, this difference will amount to a substantial economic benefit. The shorter commute time for the Airport Corridor can be partially explained by the low transit utilization rate since transit commuting takes longer and would increase the average commute times if more of the population utilized public transit. Although roughly 65 percent of commuters face a commute of less than 30 minutes, roughly 60 percent of the total commuting time is accounted for by trips that are longer than 30 minutes. Twenty percent of the total commute time in the Airport Corridor is accounted for by trips that take longer than one hour, which is a high proportion. Commute times are correlated with proximity to central business district when examining mean travel times on a municipal level.

A stark contrast emerges when looking at commute times by mode; transit riders in the Airport Corridor face much longer commutes than POV commuters. While more than 70 percent of POV commutes take less than 30 minutes, more than 75 percent of transit commuters take more than 45 minutes to get to work. This contrast is disproportionate and places an increased burden on transit dependent commuters such as low income workers who have a much higher cost (in time) of accessing work opportunities in the Airport Corridor. This contrast also makes transit a much less attractive alternative for automobile owners that might prefer to use public transit if the commuting times were comparable, foregoing the benefits of reduced congestion associated with high transit utilization.
There is demand for both workers and jobs that take place in the hours outside of the regular 9 a.m. to 5 p.m. workday. These jobs are particularly important to workers who require second jobs in order to meet their financial needs. To better assess the implications of transportation options on the large number of off-hours workers we analyzed departure times for workers in our area. There are roughly 6,000 workers in the area that commute in “off-hours”. We have defined “off-hours” as departures from home outside the hours of 5 a.m. to 12 noon or a standard morning commute. It is surprising that the Airport Corridor has the same proportion of “off-hours” commuters as Pittsburgh given that city centers tend to have a higher proportion of “off-hour” jobs associated with nightlife and entertainment. Further, “off-hours” commuters in the Airport Corridor represent twice the proportion of the national average even though it is technically a suburban area.

When looking at transit coverage for this group, the average scheduled bus frequency is 51 minutes with lower schedule variance. However, on average, the last ride offered by buses is between 8:30 p.m. (mean) and 9:18 p.m. (median). This leaves workers who start or finish between 9:20 p.m. and 5 a.m. out in the cold, often literally. This represents a large gap in coverage.

In order to better understand the cost dynamics of commuting in the Airport Corridor, we developed a commuting cost model. With this model we can benchmark costs and estimate the economic effect of changes in commuting behavior. The model takes in characteristics of the labor force and commuting population including income, mode of transport, population density, and presence of children to predict the average and total miles commuted by mode for the region. Person-miles traveled data is predicted using parameter estimates from the “Transit Cooperative Research Program Report 74”. In this report authors Parsons, Brinckeroff, Quade, and Douglas estimated a best linear predictor of miles

The total cost of commuting is $500 to $650 million annually in the Airport Corridor

<table>
<thead>
<tr>
<th>Private Occupancy Vehicles</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>User cost</strong></td>
<td></td>
</tr>
<tr>
<td>Workers earning &lt; $15,000 annually</td>
<td>$4,600 to $5,000 per year</td>
</tr>
<tr>
<td><strong>Public Costs</strong></td>
<td></td>
</tr>
<tr>
<td>•Social</td>
<td>$50 to $100 per capita (MSA)</td>
</tr>
<tr>
<td>•Governmental</td>
<td>$6.30 to $7.50 per capita (MSA)</td>
</tr>
<tr>
<td>•Environmental</td>
<td>$2.70 to $14.80 per capita (MSA)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Public Transit</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>User cost</strong></td>
<td></td>
</tr>
<tr>
<td>•Annual per person</td>
<td>$1,024 per year (mean)</td>
</tr>
<tr>
<td><strong>Public Costs</strong></td>
<td></td>
</tr>
<tr>
<td>•Operating &amp; capital costs</td>
<td>$3,400 to 6,100 per transit commuter</td>
</tr>
<tr>
<td><strong>Time value of commuting</strong></td>
<td>$5,200 per year per commuter (median)</td>
</tr>
</tbody>
</table>

Table 13: Total Commuting Cost Model
traveled using ordinary least squares regression of data from the National Personal Transportation Survey (NPTS) from 1995, which is conducted regularly by the Federal Highway Administration. User and social costs are estimated using fixed and variable cost parameters. (For a summary of the parameters developed for analyzing transportation costs and use see Appendix A).

POV Commuting
The majority of the user costs come from the fixed cost of vehicle ownership such as the cost of purchase financing, depreciation, and monthly insurance. Other costs come from variable expenses which are proportional to the miles traveled such as fuel, oil, tire wear, maintenance and repairs. Remaining costs borne by the individual include incidental accidents (not covered by insurance) and parking costs. For a commuter in the lowest income category, the cost of commuting via POV is prohibitive, equaling close to a third of annual income. The social costs of commuting include externalities such as the building and maintenance of public infrastructure, morbidity/mortality associated with accidents, travel delays/congestion, and private sector goods and services. Commuting in the Airport Corridor alone creates an additional $50 to $100 burden per person in the Pittsburgh MSA.47

The costs of POV commuting also include local government costs such as the police and court systems for traffic enforcement, and the external parking costs provided for free, the costs of accidents for those who are unable to pay, and medical and emergency services provided by the municipality. These costs represent an additional monetary burden of about $7 per capita in the Pittsburgh MSA. 48

Finally, there are environmental costs associated with the use of vehicles. By definition the external costs of commuting reflect the consumption of public goods such as air and water and noise, and long-term impacts of climate change that result. Using standard estimates of the monetary costs per mile traveled, we find that this imposes a cost of up to $15 per resident in the Pittsburgh MSA.

Transit
The average annual cost of bus fare on a per user basis is a straightforward calculation: assuming an average fare of $2 per trip and roughly 521 trips per year (two trips times 365 days in a year times five out of seven days a week), the annual cost of bus fare is $1,042. At about $1,000 per year per commuter this is a much more affordable transportation option than POV.

The public costs associated with transit include two main categories:
Operating costs: the parameters used to estimate these costs are based on composite estimates from the National Transit Data Base (NTDB) from the Federal Transit Administration including vehicle operation, vehicle maintenance, non-vehicle maintenance, and general administration.
Capital costs: these parameters were also estimated based on the NTDB including rolling stock, facilities and other expenses.

These costs are calculated on a person-mile traveled basis and amount to between $3,400 and $6,100 per transit rider in the Airport Corridor. This is substantially higher than the revenue collected from the user but creates only roughly a $2 cost per person in the Pittsburgh MSA.

Because of the limited regional transit service, social and environmental costs were not estimated.

Time Value of Commuting
The final category of costs represents a large component of the overall costs of getting to work: the time value of commuting. As mentioned above, this is very important to include in the analysis since it is a large expense and transportation policy can be aimed at reducing the aggregate commute time to gain economic benefits. The estimates of the time value of commuting are based on average per-minute income in each municipality in the Airport Corridor and the aggregate minutes traveled each year (see Table 13).

Conclusion:
Public transit is significantly underutilized in the Airport Corridor, falling far below national averages. One reason for this underutilization may be the disproportionately high commuting times associated with using public transportation in that region. Most commuters are using privately owned vehicles. Low-wage workers carry a higher commuting burden, as the cost of operating a private vehicle consumes a higher proportion of their income, and the alternative of taking public transit, though less monetarily costly, costs a great deal in terms of time spent commuting.

---

**Estimates of Costs for operating a Privately Operated Vehicle (POV)**

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed (annual)</td>
<td>$4,282.84</td>
<td>AAA composite estimate</td>
</tr>
<tr>
<td>Variable (annual)</td>
<td>$0.0714 per mile traveled</td>
<td>AAA composite estimate</td>
</tr>
<tr>
<td>Incidental accident</td>
<td>$0.0535 per mile traveled</td>
<td>Litman (TCRP), inflation adjusted</td>
</tr>
<tr>
<td>Parking</td>
<td>$0.05</td>
<td>Litman (TCRP), inflation adjusted</td>
</tr>
</tbody>
</table>

Table 14: POV Costs46
Furthermore, public transit may not be an option available to workers working more than one job or working during "off-hours".

**Economic Development Funding Programs**

Our research revealed that economic development projects in Pennsylvania are funded by a number of sources. We focused specifically on three programs funded by the Pennsylvania Department of Community and Economic Development: the Opportunity Grant Program (OGP), the Infrastructure Development Program (IDP) and the Pennsylvania Industrial Development Authority (PIDA). These programs represent only a portion of the public subsidy and development programs, but because they have been documented by the Keystone Research Center and are fairly representative of economic development in Pennsylvania, we chose to include them in our study.

The purpose of the Opportunity Grant Program is to grant funds to create or preserve jobs in Pennsylvania. Eligible parties for the OGP grant include firms or industrial development corporations (IDCs) and municipalities on behalf of firms that will create or preserve a significant number of jobs in Pennsylvania. OGP grants are targeted at firms involved in manufacturing, industry, research and development, agricultural processing, export services and at firms that are establishing a national or regional headquarters in the state. OGP grants also include a number of additional eligibility requirements. For example, a grant recipient must create a minimum of 10 full-time jobs within five years of the project completion date. More specifically, the firm must create at least one full-time job for every $25,000 of assistance and contribute at least $2 of private match for every $1 of assistance. The firm must also demonstrate that the infrastructure improvements are necessary for the efficient and cost-effective operation of the company or for the successful marketing of the facility and show that the project would not be possible without the assistance.

The Industrial Development Program (IDP) provides grants and low-interest financing for public and private infrastructure improvements. Eligible parties include municipalities, industrial development authorities and corporations, as well as municipal authorities. In addition, redevelopment authorities and local development districts may apply for IDP assistance on behalf of eligible private companies engaged in enterprises including agriculture, industry, manufacturing, research and development and export services. Real estate developers who develop sites for eligible private companies may also gain access to IDP assistance through redevelopment authorities and local development districts. Lastly, the same additional eligibility requirements that apply to OGPs apply to IDPs.

The purpose of the Pennsylvania Industrial Development Authority (PIDA) is to provide low-interest financing to IDCs for land and building acquisition, construction and renovation, resulting in the creation or retention of jobs. Parties eligible for job creation loans include firms involved in manufacturing, industry, research and development and agricultural processing. Firms establishing a national or regional headquarters or firms with computer and clerical operations centers are also eligible for job creation loans.

Moreover, all firms that meet certain wage thresholds in a particular county are eligible for job retention loans that could finance land and building acquisition, building construction and renovation, industrial park development, multi-tenant spec building construction, acquisition and renovation. Finally, firms eligible for PIDA financing must retain or create at least one full-time job at the project site within three years of loan closing date for every $25,000 loaned. Multi-occupant and industrial park projects are not subject to this requirement.
CASE STUDY

Our data analysis findings show that there is a lack of low-paid labor living within the Airport Corridor while many of the new jobs created in the corridor are lower paid retail and service positions with off-peak work hours. The area has underutilized public transit and there is insufficient service during off-peak hours. There is a lower unemployment rate in the Airport Corridor, and most of the people living in the corridor are employed in professional fields. The housing stock in the Airport Corridor region is newer and more highly valued than the housing in the Pittsburgh MSA, with fewer residents receiving public assistance than in the Pittsburgh MSA. All of this suggests that people filling the lower-paid jobs in the area are coming from outside of the Airport Corridor, and that planning of new developments in the region are not taking into account the location of the labor supply or the challenge low-paid workers face in commuting to these jobs.

To supplement our quantitative analysis of the Airport Corridor’s labor supply, public transit use and capacity, and the affordability of housing, we provide qualitative analysis of two business developments located in or near the Airport Corridor: Southpointe and Robinson Town Center.

Southpointe

Background
Southpointe is a business park located about 18 miles south of Pittsburgh in Washington County. Besides commercial sites, the park also includes residential property, a golf course, a hotel, and an ice skating rink.

The idea for Southpointe was first discussed in 1982 by Washington County leaders as an antidote to the decline in the steel industry. About 610 acres were purchased from the Commonwealth of Pennsylvania by the Washington County Redevelopment Authority (WCRA) for $776,000 in the late 1980s. The site needed sewage upgrades and the state gave more than $20 million for infrastructure improvements to the site which included $16 million to construct an interchange linking the park to I-79. Construction on the site began in 1991, and the forecasts for employment created by the development included 20 businesses with up to 900 employees.

By 2000, Southpointe had reached full occupancy, and local developers estimated that 4,100 people were directly employed by businesses in the development in October 2001. However, Southpointe was not immune to the national economic downturn that hit Pittsburgh in 2001 and 2002. During this time period, occupancy rates at Southpointe fell to as low as 54 percent. Currently the Southpointe Chamber of Commerce advertises a 96 percent occupancy rate for Southpointe, while the web site for the Washington County Redevelopment Authority claims that 3,900 people are presently employed by Southpointe businesses, with a projection of 6,300 to be employed once the park is at full capacity.

Southpointe is located just outside of our study area, but its existence impacts the economic health of the area in three main ways. Southpointe has siphoned companies away from Allegheny County and the Airport Corridor, shifting economic wealth but not necessarily creating growth. People living in our study area are employed by companies in Southpointe, especially the businesses that moved there from Allegheny County. The third factor is the effect of Southpointe and Washington County economic policy on the public policy in effect in Allegheny County. Land is cheaper and taxes are lower in Washington County. In December 1996, commercially ready land at Southpointe sold on average for $34,000 per acre while comparable land in Allegheny County (equipped with utility lines and ready-made for development) was priced at about $100,000/acre.

Employment, Housing, and Transportation Issues
According to current estimates by the Washington County Redevelopment Authority, close to 4,000 people are employed by the Southpointe development. This far exceeds the original forecast of the creation of 900 jobs. A look through the business directory provided by the Southpointe Chamber of Commerce finds more than 130 businesses and organizations located in Southpointe. These businesses tend to be in the legal, technology, financial, real estate and construction, and healthcare fields. The business park does host organizations offering additional services such as child care, a campus of the California University in Pennsylvania, and even an office of the Union of Food and Commercial Workers which represents employees including those working in food processing, financial and health care companies.

The development has also added more than 600 residences to the local township. By 1998 residential development at Southpointe included more than 55 town homes with a starting sales price of $180,000 and close to 40 single-family homes with starting prices beginning at $325,000. Average monthly rent for apartments in Southpointe in 1996 ranged from $800 to $1,000 which is higher than the upper quartile for apartment rent in the Pittsburgh
The site is advertised as a 20-minute car ride from downtown Pittsburgh without stoplights between Pittsburgh and Southpointe and there is little readily available information about public transit links to Southpointe.

Since the majority of the firms at Southpointe are in high-end services such as finance, consulting, technology and healthcare, it is safe to assume that most of those employed at Southpointe have professional training and are receiving salaries above the average for the area. There are low-paying jobs on site including food service workers, custodians, and other support services. Where do the workers filling these low-paying jobs live? It is unlikely that they live in Southpointe or within easy walking distance since the costs of owning or renting within the development are prohibitive for low-income workers. It is likely that they have to drive their own automobile or spend a great deal of time waiting for public transport and transferring between transit systems in order to get to the development.

Future development is planned for Southpointe. Pennsylvania Governor Ed Rendell approved a bill in August 2003 allowing the Washington County Redevelopment Authority to purchase and develop 221 acres adjacent to the current site for $2 million to be paid within 10 years. The expansion plans include different elements than those in the original Southpointe site. A public golf course and more affordable homes (with an average value of $200,000 per home compared to the range of $500,000 per home in Southpointe) are planned for the expansion, as well as smaller commercial parcels to encourage a wider variety of businesses to locate on the site.

Conclusion
Southpointe is described by the Washington County Redevelopment Authority as the “crown jewel of economic development in the County.” Positive aspects of the development include the more than 3,000 jobs brought to the county by businesses locating at Southpointe, a much higher number than the 900 forecasted in 1991. The diversity of the types of organizations located in Southpointe and the mix of commercial, residential and recreational sites within the development result in the site being used by many people for multiple purposes. This integrates the site with the existing local community and also creates a new sense of community by having people live in Southpointe. School board and township taxes have not increased in the last nine years, correlated with the additional revenues brought to the area since the mid 1990s by the Southpointe development.

Despite these positive results, the Southpointe development model does contain some flaws. The development is not part of a regional plan incorporating several counties and municipalities, resulting in competition across counties and municipalities to attract businesses locating in the area. This competition can lead to inefficient public policies such as Tax Increment Financing for retail businesses that shift retail rather than creating wealth for the region in the form of new jobs and expertise. In addition businesses may move their offices from one county to another as policies make one or the other county more attractive; this is costly for the business, for the counties, and most of all, for the region.

Like most development planned for the Airport Corridor, Southpointe planning did not account for the location of labor supply for the lower paying jobs created by the development or for the provision of housing for this segment of the workforce. This creates additional disproportionate costs for lower-paid workers as those seeking employment at Southpointe or other suburban developments must transcend significant hurdles of finding affordable transportation, housing and childcare in order to access the jobs appropriate for their skill level.

Robinson Town Centre

Background
The Pointe at North Fayette, Robinson Town Centre, and the Mall at Robinson are testament to a commercial and retail boom over the last ten years. Development at these sites began with the opening of IKEA in 1989; the Pointe at North Fayette was created in 1997 with the opening Home Depot, Sam’s Club, and Wal-Mart. Development of land and construction of $2 million interchange project allowed for further development of an office and shopping center across the Parkway West from the existing Robinson Town Centre strip mall.

By 1997 retailers had filled more than 1.3 million square feet in the Robinson Town Centre area. In 2000 a 20-year $28 million TIF package allowed construction to begin on the Mall at Robinson. Nearly 80 percent of the 1.2 million-square-foot center was leased by the time that it opened in October 2001. Robinson Town Centre, the Pointe at North Fayette, and the Mall at Robinson now comprise a 200-acre retail complex off the Parkway West. These sites are one of the largest commercial development projects in western Allegheny County since the Pittsburgh International Airport.

Employment and Transportation Issues
It seems clear that developers of this large retail complex did not incorporate workforce planning into the development process. Because there are more jobs than residents in this area, many workers come from outside of the Airport Corridor to fill lower-paying jobs. In 1996, after development had begun to occur and the area was referred to as a burgeoning employment center, there was no public transportation servicing the area. Lynn Manion, the
executive director of the Airport Corridor Transportation Association, said at the time that “jobs go begging because you can’t get people out here to work.”

Later in 1996, PAT transit started operating the 28X, a direct shuttle from Oakland to the Airport with stops in Robinson Town Center. Some workers are now able to get to the Robinson Town Center public transit; the Airport Flyer carries an average of 1,859 riders, many of them going to jobs in this area. However the Airport Corridor Transportation Association still finds a “last mile” problem with public transportation. Shuttles are not heavily used. For example, the 25D between Robinson and Carnegie only has a weekday ridership of 87. The retail areas are also not friendly to pedestrians of bikers. Figure 15 shows how pedestrians often create their own footpaths to get around the retail area.

While many of the jobs that have been created in this development are in the lower-paying service sectors, public transportation and walkway infrastructure does not make it easy for workers who could fill these jobs to reach them. While PAT transit operating the 28X is a positive start to getting workers to the development, more infrastructure and better pedestrian access within the site itself is needed. As a rule, big-box developers should not be permitted to control the development process.

Sidewalks for footpaths are lacking in the Robinson Town Centre area.

Conclusion
Robinson Town Centre, the Pointe at North Fayette, and the Mall at Robinson have all grown a great deal in a short period of time. The fast pace of development, along with the fact that the development is located in multiple municipalities, made planning difficult. As Bob McGurk, a vice president for one of the developers put it (referring to the Pointe at North Fayette), “What we did is let the big-box users control the development.”
The Airport Corridor was selected as the focus of our study both because of anticipated development and because of the development that has already occurred. Many studies have pointed out Pittsburgh’s lack of large scale sites available for industrial development as an impediment to economic development, and the Airport Corridor has been selected as a candidate for the creation of such sites. The Airport Corridor is home to numerous areas that have the potential to be developed as industrial sites, A 2002 report published by the Urban Land Institute selected 35 proposed development sites in the Airport. According to the Allegheny Conference, this list has been narrowed down to two specific sites on the land owned by the Allegheny County Airport Authority, as well as four other sites in the area: Starpointe, Imperial Land, Collier Commerce, and Westgate. The Airport Authority sites, along with Starpointe, Imperial Land, and Collier Commerce are shown in the map below. The other high priority site, Westgate, is located in northern Beaver County.

The most planning has been done for the developments on the land owned by the Allegheny County Airport Authority surrounding Pittsburgh International Airport. Development at the high priority sites on this land is projected to create between 6,830 and 11,166 jobs. Total employment on all Airport Authority properties of all priorities is projected to be between 17,487 and 30,158 in Findlay Township and between 2,581 and 5,610 in Moon Township. This is a substantial increase over the 65,000 jobs currently located in the Airport Corridor. Most of these jobs will be office and technology jobs, with some hospitality employment.

Other sites that are currently under construction include Westgate in Beaver County, which is projected to create 1,000 jobs, and Starpointe in Washington County, which is projected to create 900 jobs in Phase 1 and 12,000 jobs in Phase 2. In Allegheny County, the Collier Commerce site is projected to create 3,500 jobs, while Imperial Land is projected to create 9,000 jobs. Both of these projects are still in the planning and design phase. These sites are scheduled to be pad ready by October 2005, with the exception of Imperial Land, which should be pad ready by 2006.

The cost of developing these sites is high. The average per-acre development cost of the Airport Authority sites is $357,322. It is unlikely that these sites will be developed without public subsidy.
Also, it is interesting to note that many of these sites are currently not serviced by public transportation. As is shown in the map above, no planned development sites fall within a one-half mile buffer of the current public transportation infrastructure existing in the Airport Corridor.

Other organizations have also targeted the Airport Corridor in their planning. In the 2030 Long Range Transportation and Development Plan, the Southwestern Pennsylvania Commission proposes economic development initiatives in the SPC region and presents them in the context of a long-term plan. In Allegheny County alone, there are 14 developments in the Airport Corridor, including a project called “TechWorld”, which is projected to create 21,000 jobs and take up 1,500 acres. Some of the largest planned developments in the plan are located in the Airport Corridor.
CONCLUSION

Our findings support previous research conducted by the Brookings Institution,76 the Keystone Research Center,77 and the Three Rivers Workforce Investment Board78 finding that new economic development in the Pittsburgh area is occurring in the suburban areas. The majority of the jobs created within our area of study, Pittsburgh’s Airport Corridor, are low-paying jobs that are filled by people commuting in from outside of the area. This new development is located far from where many workers live, without regard for challenges including insufficient public transportation and prohibitive housing costs near new development sites.

Our recommendations focused on two main areas:

- Increasing access to affordable transportation through low-cost public-private programs such as ride-sharing programs.
- The passing of fiscal accountability legislation that would encourage transparency in the process of allocating subsidies and hold companies accountable for the promises they make to receive those subsidies.

In addition to our recommendations, it is important for public authorities to increase the rigor of analysis before making decisions to subsidize economic development.

Eligibility for Public Subsidy

Public funding for economic development is limited and should be used only where it will have the most impact. Our view is that subsidies should be used to encourage the creation of new jobs that pay more than minimum wage, that employ those who are currently unemployed or underemployed, and add to the region’s wealth without siphoning the wealth of a neighboring community. Land use and economic development authorities need to take interdisciplinary factors into account that will affect the success and cost of development before awarding public subsidies. A comprehensive analysis utilizing scientific methods must include an attempt to answer the following questions:

Labor Supply and Workforce Development

- What industries will be drawing workers to the development?
- What types of skills will workers need to possess to hold the planned jobs?
- Is there training infrastructure in place to train these workers if specialized skills are needed?
- Where are these workers going to come from? Does a sufficient pool of labor exist within a reasonable distance from the worksite to fill these jobs?

Transportation

- What is the regional commuting profile?
- What are the costs of commuting?
- What public transportation infrastructure supports the area? Is it accessible to low-paid workers?
- Will the development disrupt established commuting routes?
- Will new transportation infrastructure be necessary to accommodate workers and current residents? Who will pay for new infrastructure?

Housing

- What are the rental and purchase costs of housing within a short commute of the new development site?
- Is there a mix of housing types and values that can accommodate residents with varying income?
- Are there plans for new housing developments in the area? What is the expected average selling price?
- Are there public or private programs available in the area assisting low-income workers in buying or renting housing?
- What is the stock of public housing and what are the eligibility requirements?

Other

- Is there access to affordable quality childcare?
- Are there affordable healthcare providers within an accessible range from the site?
- Is this development attracting companies from inside or outside the region (shifting jobs or creating new jobs)?

By looking at the issues listed above in addition to the requirements already in place for state grant and loan programs, authorities can focus on economic developments that will employ those most in need of work and therefore developments that are most worthy of public subsidy.
Topics for Future Study

Because this project was under a time constraint of ten weeks from start to finish, there are many areas of study that we were not able to explore. These include:

A map of the economic development decision-making process:
- How are economic development decisions made, including site location, the amount of subsidy, and the award of other types of incentives?
- What public and private entities are involved in the decision-making process?
- Are transportation and/or workforce planners involved?
- What is the role of the Southwestern Pennsylvania Commission and other regional planning authorities in the process of locating sites and awarding public subsidies?

A quantitative methodology for calculating the costs (financial and the cost of public externalities) of current development patterns. This calculation should include:
- Cost of the actual construction of the site.
- Commuting costs borne by workers in time and money.
- Childcare access and cost.
- Costs of the company in attracting, training, and retaining workers which can be complicated by long commute times.
- Costs to the local environment including from increased private vehicle use, Greenfield development, water runoff from parking lots and new roads, sewage and waste production.

Benchmarking of current local and national programs that provide incentives (or disincentives) for companies to locate in the urban core. These programs might include:
- Regional alliances that allow for common policies on where and how companies can locate their sites without any one city or county losing competitiveness by having more stringent requirements than neighboring communities.
- Public incentives for companies to locate in brownfield locations within urban centers, utilizing otherwise abandoned land and buildings.
- Public incentives attracting companies to communities with higher unemployment rates.
- Analysis of impact of fiscal accountability legislation on economic development in states that have implemented model policies, such as Minnesota and Maine.
## APPENDIX

### Appendix A: Transportation Analysis Methodology: Summary of Parameters

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### PRIVATE OCCUPANCY VEHICLES

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### TRANSIT

#### Social Cost

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#### User Cost

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<td>Trips per year</td>
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### REGIONAL POPULATION SUMMARY

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<td>Labor Force</td>
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<td><strong>SAMPLE: workers</strong></td>
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<td>(PER CAPITA INCOME IN 1999 Universe: Total population; Census 2000 (SF 3) - Sample Data)</td>
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<tr>
<td>Per capita income in 1999</td>
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<td>92%</td>
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<td>3%</td>
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<td>Worked at home</td>
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<td>POPULATION MSA</td>
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Appendix B: Endnotes

1 The H. John Heinz III School of Public Policy and Management at Carnegie Mellon University requires students in the Master of Science program to complete a group “systems synthesis” project for a real world client. This project takes the place of a thesis and allows students to synthesize skills they have learned from their coursework in the program and utilize them to navigate the team work process while creating a product that will serve the local community.


4 Selected alternatives from the Multimodal Airport Corridor Project. <www.portauthority.org/grow/capital/MultiModal/multimodal.htm>


21 Census 2000. Commuting Data by County Subdivision.

22 Census 2000. SF3 P43 “Sex by Employment Status for the Population 16+ Years”

23 Census 2000. SF3 P64 “Public Assistance Income in 1999 for Households.”

24 Careerlink is a cooperative effort to provide one-stop delivery of career services to job seekers, employers and other interested individuals. <www.pacareerlink.state.pa.us/homeframe.asp?nocache=7%2F22%2F2004+10%3A20%3A38+PM>

25 Census 2000. SF3 P43 “Sex by Employment Status for the Population 16+ Years.” Careerlink data is from the Careerlink Program.


27 Census 2000. SF3 H74 “Value for Specific Owner-Occupied Housing Units”, H8 Vacancy Status, H63 “Median Gross Rent (Dollars)".

28 Census 2000. SF3 H75 “Lower Value Quartile Housing Units”, H76 Median Value Quartile Housing Units”, H77 “Upper Value Quartile Housing Units”


30 Allegheny County Housing Authority. County Sites Map. <www.achsng.com>

31 Allegheny County Housing Authority. <www.achsng.com>

32 Allegheny County Housing Authority. <www.achsng.com>

33 Allegheny County Housing Authority. <www.achsng.com>

34 Housing Authority of Beaver County. <beavercounty.com/Service/HousingAuthoriy5.asp>

35 Allegheny County Housing Authority. <www.achsng.com>

36 Housing Authority of Beaver County. <beavercounty.com/Service/HousingAuthoriy5.asp>

37 Census 2000. SF-3 H67. Housing Authority of Beaver County. Calculated based on the assumption that rental rates are distributed uniformly over the range $500 - $800. <Beavercounty.com/Service/HousingAuthority5.asp>


40 In the Transportation Analysis section, data for the City of Pittsburgh is used in comparison with the Airport Corridor rather than data for the Pittsburgh MSA.

41 Southwestern Pennsylvania Commission GIS files.

47 Specific cost parameters: see TRCP Report 74, Ch XI (inflation adjusted for Pittsburgh).
48 Specific cost parameters: see TRCP Report 74, Ch XI (inflation adjusted for Pittsburgh).
49 The Pennsylvania Department of Community and Economic Development (DCED) web site. Opportunity Grant Program. 
<www.inventpa.com/default.aspx?id=294>
50 The Pennsylvania Department of Community and Economic Development (DCED) web site. Infrastructure Development Program. 
<www.inventpa.com/default.aspx?id=292>
51 The Pennsylvania Department of Community and Economic Development (DCED) web site. Pennsylvania Industrial Development Authority. 
57 Southpointe Chamber of Commerce. <dwp.bigplanet.com/southpointe/chambeerevents/>
58 Washington County Redevelopment Authority. <www22.inetba.com/redevelopmentauthority/econdevel.ivnu>
60 Southpointe Chamber of Commerce. <dwp.bigplanet.com/southpointe/homepage1/>
66 Washington County Redevelopment Authority. <www22.inetba.com/redevelopmentauthority/econdevel.ivnu>
72 Southwestern Pennsylvania Growth Alliance.
73 Southwestern Pennsylvania Growth Alliance.