

II. Building Local Wealth Through Equitable Transit-Oriented Development (eTOD) in the South Central Corridor of Phoenix

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A. Executive Summary

Project Area and Purpose

The area to be served directly by Phoenix's new Light Rail Transit (LRT) line is a corridor one mile from east to west, extending approximately 5.5 miles, and including 7 planned station areas, from Lincoln Avenue in the central business district to Baseline Road near the southern boundary of the city.

Within this area (the Corridor) approximately two thirds of the households rent their housing. The median renter household in the Corridor has an annual income of approximately \$21,535, spends \$5,885 on transportation (the bulk of which is to own and maintain one or more vehicles), and has a combined cost of housing and transportation equal to \$14,358 or 67% of its income. For a household in this or a similar situation, the advent of the South Central LRT presents risks and opportunities. The household may be displaced from the Corridor by rising housing costs, or it may raise its net income by finding new employment and lowering its transportation costs as its neighborhood becomes an equitable transit-oriented development (eTOD) community. The purpose of this paper is to present strategies through which many Corridor households, aided by local government and other supporters, may take the latter path to a new level of economic security in an eTOD.

Method

For the purposes of analysis in this paper and the others in this series, the Corridor is defined as a half-mile buffer around South Central Avenue, from its cross streets at Lincoln Avenue to Baseline Road. Where indicated, the one-mile buffer was also analyzed. The corridor and half-mile areas around each potential station were analyzed using [U.S. Census Bureau On the Map Longitudinal Employer-Household Dynamics \(LEHD\) Origin-Destination Employment Statistics \(LODES\) data](#) and a CNT internal tool that proportionally sums [U.S. Census Bureau American Community Survey 5-year data](#) across the block groups in each station area. Data from [CNT's Housing + Transportation \(H+T[®]\) Affordability Index](#), [AllTransit[™]](#), and the [U.S. Department of Housing and Urban Development's Location Affordability Index](#) are also referenced in this series of papers.

Capitalizing on Transit Connectivity

In order to consider strategies for Corridor residents to build financial security in eTOD communities, we need to review some basic information about the population of workers who live in the Corridor (the Corridor workforce), their means of travel, and characteristics that relate to their employment compared to other workforce populations in Phoenix:

- Workers who live in every station area of the Corridor could reach tens of thousands of jobs via public transportation with current levels of service, but few do so. The travel behavior of Corridor residents correlates strongly with several other factors in their station areas. Residents who live in communities with relatively dense populations, amenities and jobs (such as the Lincoln station area)

have higher levels of transit service and use and lower transportation costs. The community station areas with relatively low densities of residents, jobs, and amenities (such as the Baseline community) have lower levels of transit service and use and higher transportation costs.

- The Corridor as a whole is a job center with approximately 44,500 jobs, of which more than 70% are in the Lincoln (Downtown) station area. The number of workers who live in the Corridor is approximately 7,500. The number of workers who live in the Corridor and hold a job within it is less than 200. Corridor job holders and the Corridor's employed residents (the Corridor workforce) are virtually different populations.
- We see stark contrasts for job holders (those who work in the corridor, but live anywhere in the Phoenix area) and resident workers (residents of the corridor who are employed anywhere in the Phoenix area) in the corridor:
 - Corridor job holders: Far higher percentages of Corridor job holders earn high incomes, are college graduates and work in some fields that usually require advanced education including public administration, finance, and insurance.
 - Corridor resident workers: Workers who live in the corridor are similar to Corridor job holders in what might be termed middle income positions. Similar percentages of the Corridor workforce have lower middle range incomes and mid-level educations (high school graduation, some college, or an associate degree). While high percentages Corridor residents are employed in retail and hospitality jobs, they are also represented in the professional fields where job holders predominate. On a percentage basis, Corridor residents surpass job holders in their employment in health care and education and in their employment in manufacturing and logistics, fields that generally offer higher wages than retail or hospitality jobs.
- When the Corridor workforce is compared with the city of Phoenix workforce, most of the patterns observed in the comparison with Corridor job holders are seen again. Corridor residents are less likely than workers in the city as a whole to earn high incomes or be college graduates. However, similarities in middle levels of income and education are also strong in this comparison. The percentages of Corridor residents employed in health care and education are nearly equal to those of the city workforce; however, given differences in levels of college graduation, the typical positions of Corridor residents in these fields may be lower. The percentages of the Corridor workforce employed in manufacturing and logistics are higher than in the city workforce.

These analyses indicate that the Corridor workforce is most likely to be immediately competitive in employment that involves paraprofessional or technical skill certification for entry or mid-level positions in fields that include health care, administrative support, computer maintenance, manufacturing, and construction trades. A review of the professional workforce literature, including the plans of the Phoenix Business Development and Workforce Board, demonstrates that there is high demand for such skills, especially in the steadily expanding economy of Phoenix. Workforce literature also demonstrates that there are widely replicated programs to provide "career ladders" to workers who gain a foothold in technically skilled employment and seek advancement through job performance and ongoing education. South Mountain Community College, located near the Corridor, is a model provider of such programs. These findings, coupled with consideration of the job access for Corridor residents that transit provides

now and will expand through the South Central LRT, leads CNT to propose several strategies for building the wealth of Corridor residents through transit-accessible employment:

- *Create a computer-based analytical tool for job seekers that will, upon request, present all the employers in a given industrial sector that are located in the transit shed of a Corridor LRT station.*
- *Establish partnerships with workforce development organizations, including South Mountain Community College, to provide training that includes associate degrees or skill certifications for Corridor residents in selected industry sectors, tailoring these training programs in light of input from prospective employers located in the transit sheds of Corridor LRT stations. This could be combined with financial assistance to enable participation by low-income residents.*
- *Conduct a multi-faceted initiative to encourage use of the LRT and other Valley Metro services in the Corridor, particularly by households that would benefit by becoming transit users in order to find new employment and/or otherwise secure their financial position. Components of the initiative would include:*
 - *A neighborhood transit pass -- based on the model of the Neighborhood Econ Pass program of Boulder, Colorado -- that may be specially discounted and promoted*
 - *An employer and commuter outreach program aimed at providing the full financial benefits of transit use for Corridor transit commuters. Components of this program would include: Promotion of Valley Metro's Employee Platinum Plus pass; Employer counseling to ensure that employees maximize federal income tax benefits from using transit; exploring shared mobility options; and marketing of transit passes through station area retailers.*

Building Businesses and Jobs in the Corridor

Land Use & Land Management

In addition to the connections eTOD can facilitate to jobs within the Corridor and to large parts of the region, eTOD can build wealth in the community by modifying land use and infrastructure and triggering development in the community's interests. The Corridor encompasses approximately 3,345 acres of land that are not in public ownership and use. The land is zoned to support a diverse economy and wide range of housing types, with his breakdown of acreage: Multifamily Residential -- 875 acres\ Single Family Residential -- 696 acres\ Downtown -- 377 acres\ Industrial -- 799 acres\ Commercial --598 acres.

Recorded vacant acres account for 7% of the privately held land in these categories, a moderately low level of vacancy for a mature urban area with a high percentage of low-income residents. However, substantial acreages not identified as vacant appear to be severely under-utilized (meaning that structures or other improvements to property have an assessed value that is less than 20% of the total assessed value of the property). Also, the rate of commercial vacancy is approximately 20%, and out of 472 buildings identified as vacant, 226 are commercial. Vacant and under-utilized properties are of critical concern in a redeveloping community because these are the properties most readily available -- either for developments that would trigger displacement or for projects that would create mixed-income housing and jobs for local residents.

Land banks are organizations established in dozens of US urban regions to carefully track vacant and under-utilized land at the parcel level, acquire land that is abandoned or otherwise severely neglected, maintain or improve vacant properties, and convey them to private investors who will execute projects in the public interest. Nationally, the experienced organizations including the Center for Community Progress and the Center for Creative Land Recycling counsel local governments and community organizations in the development and successful operation of land banks is. Accordingly, CNT proposes the following strategy:

- *The City of Phoenix, in collaboration with community organizations in the Corridor, should explore the possibility of establishing a land bank organization to serve the City of Phoenix. If a land bank, is created, the Corridor should be treated as a pilot area for the land bank's development.*
- *If the development of a Phoenix land bank organization were determined to be infeasible or subject to long delays, the City should create a program to perform as many land bank functions as possible. This could include creating a services agreement with an existing entity, such as a CDFI, to act as a temporary land holder, while conducting other land bank activities, such as mapping and tracking opportunities. Alternatively, the feasibility of making use of an independent community land trust in Phoenix could be explored.*

Production Businesses & Job Growth

The broad category of "Production Jobs" encompasses occupations ranging from manufacturing and logistics, to the functions of skilled manual labor that are necessary for the maintenance of a city and especially its central business district. Production businesses commonly share industrially zoned areas. Even post-industrial, space-constrained cities, such as San Francisco and Washington DC, have created zones for the location of production businesses.

Production occupations generally provide higher wages and better benefits than other types of jobs available to workers with the same level of general education. Also, like some professional service fields such as health care and financial services, production occupations include entry and mid-level positions with career ladders that enable workers to rise to secure, well-paid employment, through strong job performance and continuing education.

Production businesses and jobs are a significant part of the Corridor's economy, providing 11.5% of the Corridor's jobs and occupying 24% of its privately-owned land. The Corridor workforce has higher percentages of workers in production occupations than the overall workforce of the city of Phoenix. To maintain and expand the production sector's contribution to the Corridor's development, CNT advises the not-for-profit organizations that support small business development in the Corridor to work with the City of Phoenix and Valley Metro in carrying out the following strategies:

- *Create a plan for the retention and growth of production businesses in the Corridor, based in part on interviews with a representative number of the Corridor's production business owners\managers and central business district customers of production businesses.*
- *Include production businesses and workers in the strategies (noted above) to engage workforce development partners in the continuing education and job placement of the Corridor workforce.*
- *Include the land zoned for industrial businesses in the strategies of the land bank (noted above).*

- *Create safe and convenient “last mile” access between the Corridor LRT stations and production business workplaces.*

Construction Businesses and Job Growth

Construction businesses merit particular mention in plans for wealth creation through eTOD for several reasons: because heightened construction activity should be anticipated in the Corridor as the incentives triggered by the LRT take hold, because building construction and rehabilitation are significant industries in the Corridor, and because the construction sector includes numerous small, and often minority contractors, who could take part in the building work but are often excluded. So the following strategic actions are proposed for organizations that support small business development in the Corridor and the City of Phoenix.

- *Advocate for the inclusion of local and minority contractors and workers in new construction proposed in the Corridor.*
- *Create, maintain, and promote a database of minority and local building contractors and skilled workers who can be recommended to perform good work in building construction.*
- *Include building trade workers in the paraprofessional and skilled workforce development initiatives targeted to Corridor residents.*
- *Include building trade contractors in the support services for small business owners.*

Retail and Hospitality Business Retention, Growth & Job Creation

Retail and hospitality businesses are a major component of the Corridor’s economy. Approximately 23% of resident workers who live in the Corridor work in retail or hospitality in the Phoenix region and 16% of the job holders—workers from around the region that work in the Corridor—have jobs in these industries. Moreover, businesses in these sectors are essential components of an eTOD community development strategy because they can meet many of the daily needs of local residents, enabling them to live well while reducing their transportation costs. These businesses also present much of the “face” of the community as viewed from South Central Avenue; impressions of the community’s attractiveness to investors, prospective new residents, and even long-term residents are strongly influenced by the appearance of these businesses. The importance of retail and hospitality businesses is even greater in the Corridor’s southern station areas, where there are few other employers.

Accordingly, the fact that 20% of the Corridor’s commercial properties are vacant, that some retail and restaurant owners are reporting pressures from increased rents in advance of higher sales, and that many of these businesses are not capitalized to make adjustments that will welcome a new clientele related to the LRT are matters of concern for the entire Corridor.

Any strategies for the retention and development of retail and service businesses arising from this analysis will need to be harmonized with the findings of the business retention and development group of the project planning team, which is currently conducting research. Subjects to consider in melding eTOD strategies with the business support group’s findings include these points:

- Immediately establishing a business retention and support program for small business owners that will include an organized program to minimize disruption during the LRT construction period and the offer of one-to-one counseling services for small business owners
- Connecting with the large customer base accessible through transit, by promoting unique public resources and developing and marketing point-of-destination businesses as anchors in each station area
- Ensuring a mix of businesses in each station area that can meet the daily retail and service needs of residents within a half-mile radius of the LRT station
- Contributing to the development of green infrastructure and walkable streets leading directly to commercial districts, within each half-mile station area
- Capturing a larger customer base from middle-distance community areas through the measures proposed to attract customers from the entire transit shed and secure the loyalty of customers in the immediate community
- Advocating for the attraction of new major employers to the Corridor

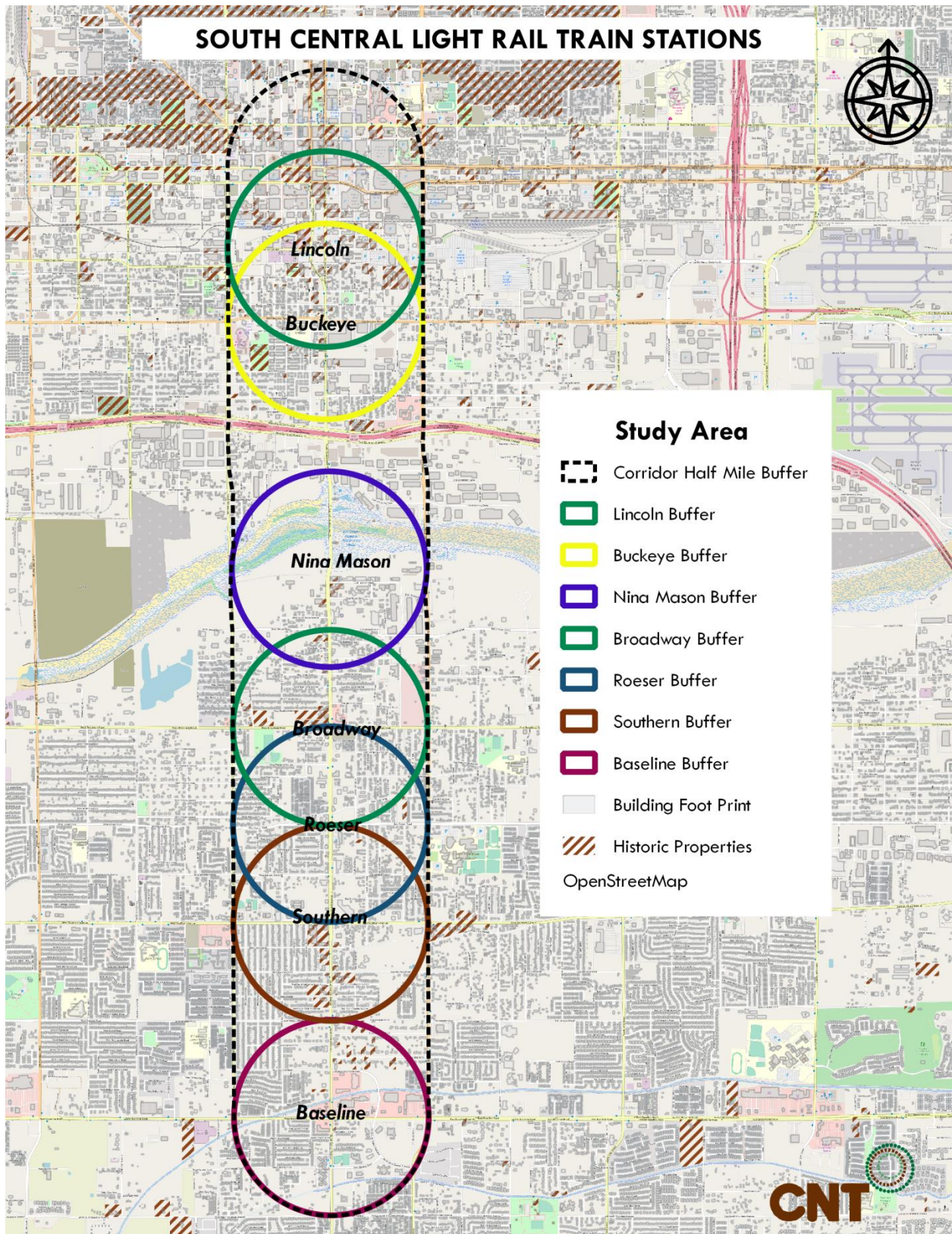
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B. Introduction

This document is the second in a series of papers that provide information and present strategies for achieving equitable transit-oriented development (eTOD) in the South Central Avenue Light Rail Transit Corridor of Phoenix (the LRT Corridor). The Corridor area is a one-mile diameter buffer around the stations of the recently funded LRT line that will run down Central Avenue, some 5.5 miles from the outskirts of downtown Phoenix to a station near the southern boundary of the city. Seven stations are planned for the LRT, each the focal point of a half-mile radius area within the Corridor. (A basic map of the Corridor is provided on the following page.)

In the first paper of this series CNT described the income and expense dilemma faced by many Corridor households, especially those who rent their housing and make up more than half of the Corridor population. The median renter household in the Corridor has an annual income of approximately \$21,336, spends \$5,885 on transportation (the median of a range between \$3,733 and \$8,044 per year, which varies directly with the number of vehicles a household owns and maintains), and has a combined cost of housing and transportation equal to \$14,358 or 67% of its income.¹ For a household in this or a similar situation, the imminent construction of the South Central LRT presents risks and opportunities. **If the household can neither stabilize its housing costs by finding guaranteed affordable housing nor raise its income by finding new employment, that household is likely to be displaced from the community.** However, if the household breadwinner(s) can find better paid employment, either through improved access to jobs that the LRT will provide or development that the LRT will stimulate in the community, its financial position will improve. Because the new job(s) will either be accessible through transit or in the immediate community, it will not increase, and possibly reduce, the typical household's transportation expenses, raising its net income and financial security to a new level.

¹ A more detailed analysis of the Housing + Transportation costs of Corridor households is provided in Paper I of this series: Center for Neighborhood Technology, "Equitable Transit-Oriented Development (eTOD) South Central Avenue Light Rail Transit Corridor", pages 15-18, November, 2018, [Phoenix eTOD Series Paper I Draft 1118](#)



Map II.1. City of Phoenix Data

A third paper in this series describes the dynamics of building an affordable and sustainable eTOD community. This paper presents more detailed information about the potential for employment and local business development that are becoming available through the advent of the Corridor LRT, along with strategies that could help Corridor residents realize this potential.

Method

For the purposes of analysis in this paper and the others in this series, the Corridor is defined as a half-mile buffer around South Central Avenue, from its cross streets at Lincoln Avenue to Baseline Road. Where indicated, the one-mile buffer was also analyzed. The corridor and half-mile areas around each potential station were analyzed using [U.S. Census Bureau On the Map Longitudinal Employer-Household Dynamics \(LEHD\) Origin-Destination Employment Statistics \(LODES\) data](#) and a CNT internal tool that proportionally sums [U.S. Census Bureau American Community Survey 5-year data](#) across the block groups in each station area. Data from [CNT’s Housing + Transportation \(H+T®\) Affordability Index](#), [AllTransit™](#), and the [U.S. Department of Housing and Urban Development’s Location Affordability Index](#) are also referenced in this series of papers.

C. Capitalizing on Transit Connectivity

1. Numbers and Locations of Transit-Accessible Jobs

Approximately 8,300 residents of the Corridor are currently employed. With current levels of transit service, these residents have access to hundreds of thousands of jobs within half an hour, via transit, as illustrated in Chart II.1. Yet only 7.4% of the Corridor’s workers commute by transit.²

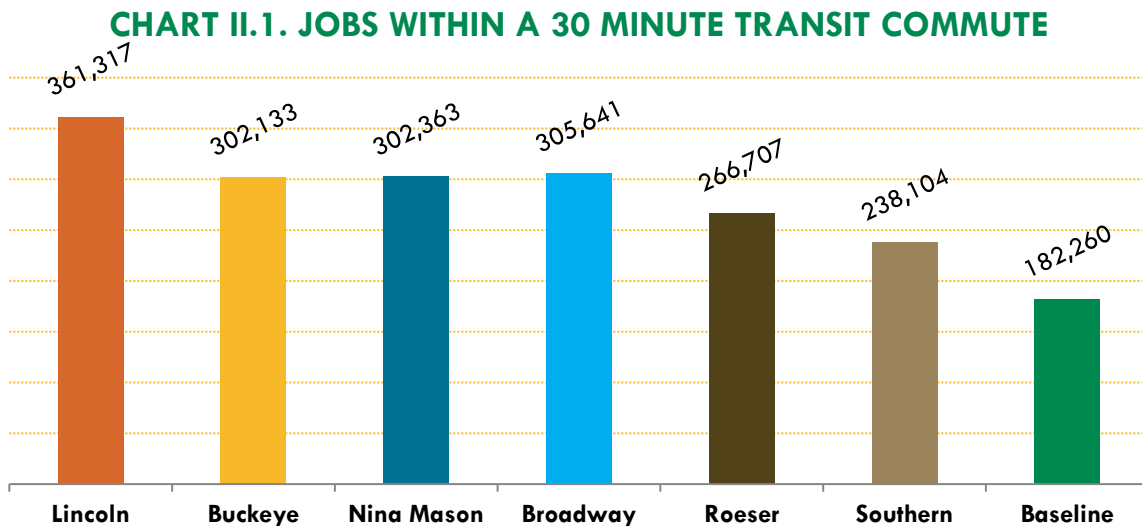


Chart II.1. Source: AllTransit™. This chart shows the number of jobs available to station area residents using existing transit systems within a 30-minute commuting time frame.

² Center for Neighborhood Technology, AllTransit™ American Community Survey 5-year Estimates 2016

Approximately 45,000 of these transit-accessible jobs are within the South Central Avenue Corridor itself. Yet there is negligible overlap between these jobs in the Corridor and the employed Corridor workforce. Fewer than 2% of employed Corridor workers have jobs in the Corridor. The rest commute to other locations, over 90% of them by means other than transit.

CHART II.2. CORRIDOR JOBS + WORKERS

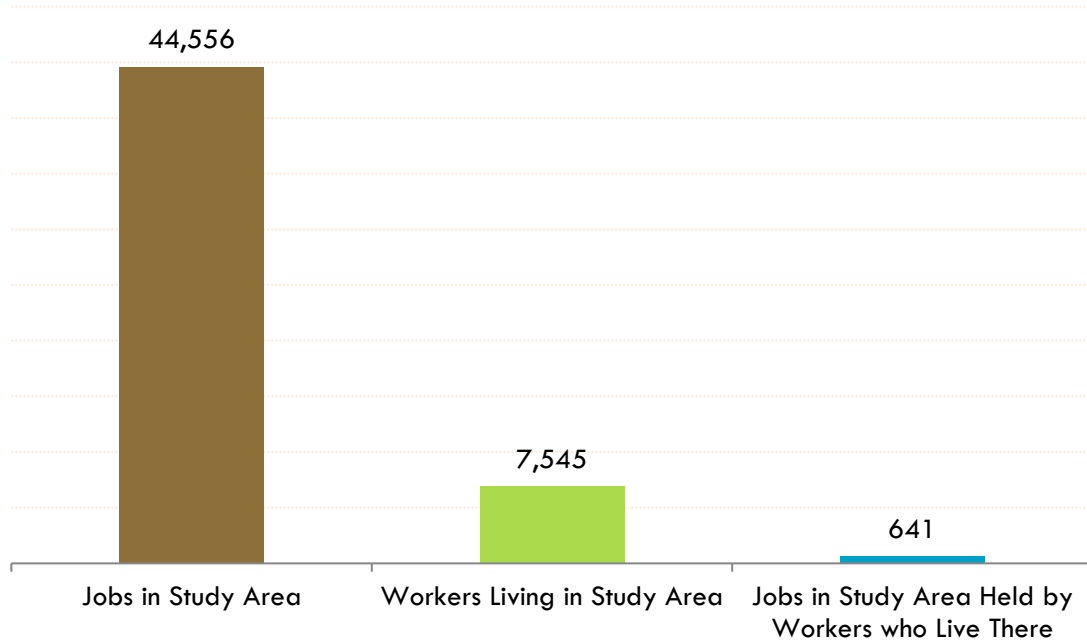


Chart II.2. Sources: On the Map LODES. This chart compares the jobs available within the study area corridor, the working residents and the number of workers who live and work within the corridor.

Of course, many Americans, and particularly Phoenix area residents, do not live close to their jobs or enjoy high-frequency transit access to them. An analysis of 2012 data by the Brookings Institution found that Phoenix ranked 90th out of America’s largest 96 metropolitan areas in terms of distance between where residents live and work.³ National research has found that average commute trip lengths are continuing to expand, from 22.85 miles in 2009 to 25.01 miles in 2017.⁴ The study found that these distances were especially problematic for lower-income workers who are less likely to own reliable cars

³ Elizabeth Kneebone and Natalie Holmes, *The Growing Distance Between People and Jobs in Metropolitan America*, The Brookings Institution, April 2015, https://www.brookings.edu/wp-content/uploads/2016/07/Srvy_JobsProximity.pdf

⁴ Federal Highway Administration, *National Household Travel Survey 2017*, Table 27, page 79, https://nhts.ornl.gov/assets/2017_nhts_summary_travel_trends.pdf

and must pay far larger percentages of their income for transportation than more affluent workers.⁵ It is partly in response to this situation that since 2012, the transit agencies and local governments of metropolitan Phoenix have made aggressive efforts to reduce worker commute times through investments in LRT, public education, and an aggressive ride sharing program.⁶

Development of the South Central Avenue LRT is a major example of Phoenix’s public investment to improve connectivity and realize the advantages of a more compact and transit-oriented built environment. However, current levels of transit use and local employment of community residents indicate a need for further study and action if these benefits are to be realized by the city and the Corridor communities.

If we take a closer look at transit utilization within the Corridor, we see a definite correlation between the level of transit service, transit use, and lower household transportation costs. In the Lincoln station area, 15.5% of commuters use transit currently. The Transit Connectivity Index (TCI) -- a measure of available transit service, with higher numbers indicating more robust service⁷ -- is 11.5, and the median transportation cost for all households is \$6,638. In contrast, from the Baseline station area, only 3.6% of commuters use transit, the TCI is 5.2, and the median household transportation cost is \$10,026. Although the correlation is not ideal, other stations generally fall into this continuum, in which transit use and lower transportation costs align with availability.

Table II.1 Transit Commuting & Connectivity in Station Areas

Station Area	Transit Users %	Median Household Transportation Costs	TCI Score
Lincoln	15.5%	\$6,638	11.5
Buckeye	13.5%	\$5,179	9.4
Audubon	3.5%	\$8,525	6.1
Broadway	7.5%	\$8,832	6
Roeser	7.6%	\$7,122	6.3
Southern	5.4%	\$8,289	7
Baseline	3.6%	\$10,026	5.2
Total/AVG	7.4%	\$8,025	7.4

Table II.1. Sources: CNT H+T Index Analysis, ACS 2012-2016 5-year Estimates

⁵ Ibid and Natalie Holmes and Alan Berube, *Jobs in Phoenix Are Growing but Getting Farther Away*, The Brookings Institution, April 2015, <https://www.brookings.edu/blog/the-avenue/2015/04/02/jobs-in-greater-phoenix-are-growing-but-getting-farther-away/>

⁶ Transportation for America, *Valley Metro - Promoting Alternative Modes of Commuting to Improve Air Quality*, <http://t4america.org/maps-tools/local-successes/phoenix-trip-reduction/> also Maricopa County, *Maricopa County Travel Reduction Program*, <https://www.maricopa.gov/2388/Travel-Reduction-Program>

⁷Center for Neighborhood Technology, AllTransit Metrics, <https://alltransit.cnt.org/metrics/>

The Corridor's continuum of transit use, transit access, and lower household transportation costs also aligns with business density, as illustrated by the Business Density Map (or heat map) presented as Map II.2. We see that business density is highest by far in the Lincoln station area, which reaches into the Phoenix central business district (CBD). Density declines rapidly through the Buckeye station area and is relatively low through the central and southern portions of the Corridor.

The density of businesses as a fourth factor aligning with transit use, transit availability, and lower household transportation costs demonstrates the relationships of location efficiency. With the density found in the Phoenix CBD, many of the businesses are providing amenities for the employees of other firms and for neighborhood residents. A variety of retail and service businesses are accessible by walking or a short transit ride. Commuters do not need to drive once they arrive at such a location efficient district; neither do residents in meeting most of their daily needs.

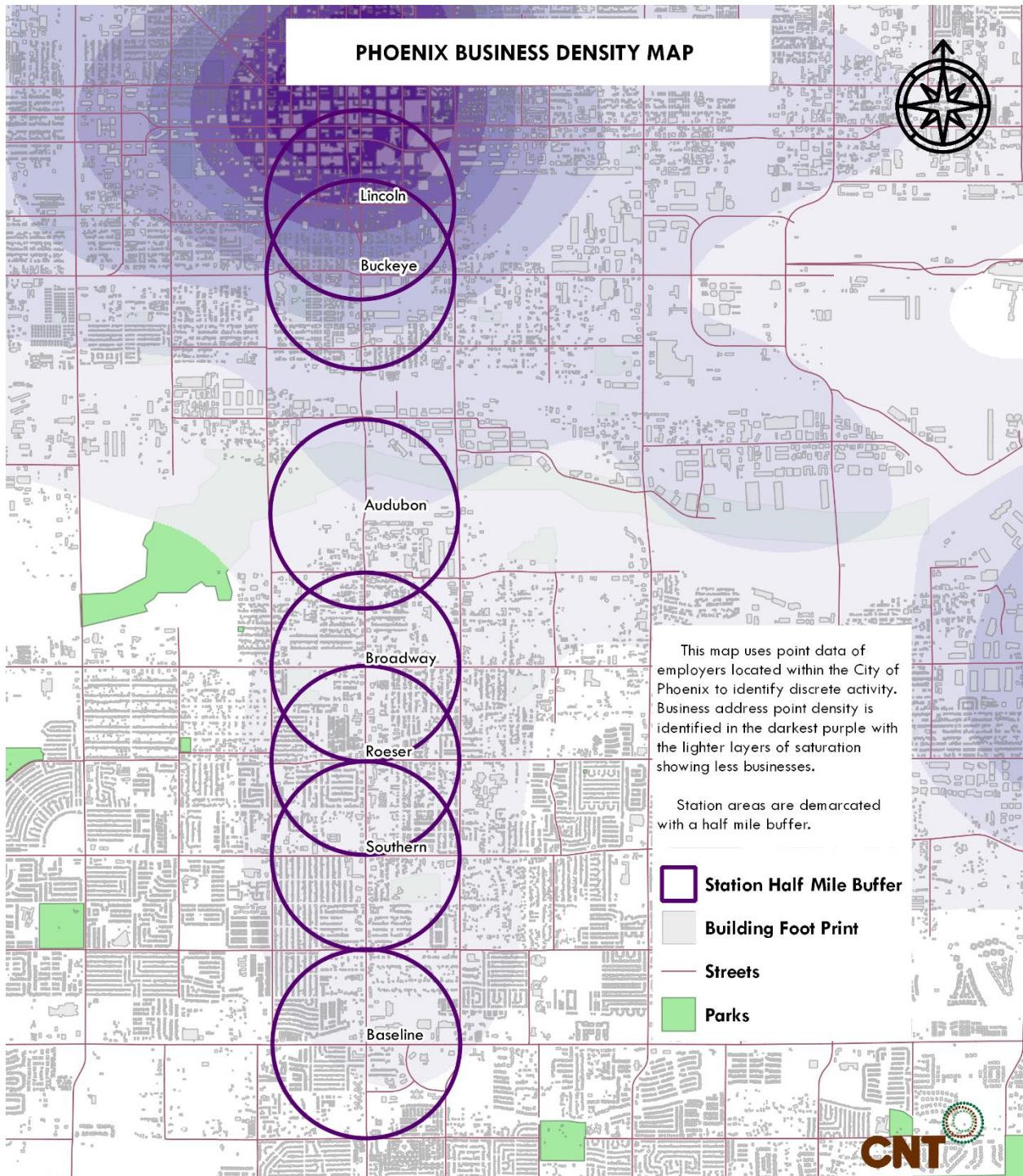
The National Household Travel Survey has found that approximately three fourths of the trips Americans routinely make are not job related but trips to shops, friends, schools, personal business appointments, entertainment -- the activities of everyday life.⁸ If the members of a household can conduct the 75% of their trips for general activity, as well as commuting, without driving a car, they will be able to reduce their transportation costs, which are largely the costs of owning and maintaining a vehicle or multiple vehicles. This is the relationship demonstrated by the correlations in Table II.1. and their alignment with the business density map.

The savings associated with location efficiency are an important form of community wealth. The potential for households to realize such savings is one reason for the emphasis placed in this paper on the retention and growth of the Corridor's retail and service businesses. It is also a major factor discussed in Paper III on eTOD community development.

Household savings as a form of community wealth goes beyond the significant transportation savings available through location efficiency. Individual households have opportunities to make substantial savings in regard to food, energy, and telecommunications. CNT periodically offers a program named *Equity Express Green Financial Education*, which includes six facilitated workshops provided once a week to classes of 15 to 20 participants. *Equity Express* shares tested practices in reducing household costs and a household's environmental footprint. Follow up research with program graduates has shown that they realize average household savings of \$125/month.⁹

⁸ Federal Highway Administration, *National Household Travel Survey 2017*, Table 11, page 40, https://nhts.ornl.gov/assets/2017_nhts_summary_travel_trends.pdf

⁹ Center for Neighborhood Technology, *Equity Express*, https://www.cnt.org/sites/default/files/publications/CNT-EquityExpress-Chicago_2018.pdf



Map II.2 City of Phoenix data

Considering business density as a reliable indicator of job density, the current transit system gives Corridor residents access to tens of thousands of jobs within half hour an hour of travel time, as illustrated by Chart II.1. The LRT will significantly increase the universe of jobs within this travel time. It

will make jobs in the CBD far more accessible to residents in the southern station areas of the Corridor. It will also expand the number of jobs accessible to the east and west of the Corridor. As Map II.2 demonstrates, most stations on the Corridor LRT are at the intersection of Central Avenue and major arterial streets with a Valley Metro bus route. Under current conditions, a “two-seat ride” requiring a transfer between buses, is impractically long for many Corridor workers, but with the high-frequency and faster service of the LRT, transit commutes to jobs on arterial streets that cross Central Avenue will become viable for a larger number of Corridor residents.

However, transit access will be an essential but not necessarily sufficient condition for eTOD to bring quality employment for many lower-income residents of the Corridor. In addition to the small percentage of Corridor jobs held by Corridor residents, the Buckeye community exemplifies the need for more than proximity and transit service to make effective job connections. Buckeye is the second closest station area to the Phoenix CBD job center; yet this area has the Corridor’s lowest level of household income. A residence-job mismatch exists between the job skills of many Buckeye community residents and the professional and paraprofessional jobs available in the CBD. Such mismatch situations are common in American cities, and they must be mitigated by intensive programs of workforce development and guided job placement.¹⁰

2. Matching Corridor Residents with Transit-Accessible Jobs

The following section of this paper evaluates the ways that workers who reside in the Corridor (the Corridor Workforce) may be matched or mismatched with job opportunities in certain geographies, such as station areas, the Corridor, the CBD, or the city of Phoenix. This evaluation has two aspects:

- Comparing characteristics of the Corridor workforce (such as its level of educational attainment) with other workforce populations. This comparison will show how the Corridor workforce possesses or lacks characteristics that will allow it to compete with others for jobs. The purpose of this exercise is to identify feasible strategies for making the Corridor workforce more competitive.
- Comparing the number of jobs in certain industry sectors and geographies that are held by the Corridor workforce and others. These comparisons may indicate open or saturated labor markets for workers with the Corridor workforce’s experience and skills.

¹⁰ Keith Ihlanfeldt, “Spatial Mismatch Between Jobs and Residential Location Within Urban Areas,” *CityScape*, HUD User Periodicals, Vol 1, Number 1, Chapter 11, pages 219 -244, <https://www.jstor.org/stable/20868372?seq=1/subjects>; Yingling Fan, *The Planners War Against Spatial Mismatch*, *Journal of Planning Literature*, February 2012, <https://journals.sagepub.com/doi/abs/10.1177/0885412211431984?journalCode=jplb>

Idim, Footnotes 4 and 5

a. **Workers Who Reside in the Corridor & Workers Who Hold Jobs in the Corridor**
 We have noted that the overlap between workers who reside in the Corridor and workers who hold jobs there is very small. Table II.2 highlights the similarities and differences between these groups of workers. This comparison should indicate how Corridor workers could be better matched with jobs in their own communities, as a starting point to overcoming residence-job mismatch more generally.

**TABLE II.2 SOUTH CENTRAL CORRIDOR:
 RESIDENT WORKERS & JOB HOLDERS COMPARISON**

STUDY AREA HALF MILE BUFFER					
Homeowner Households	2,240		Renter Households	3,298	
Homeowner Median Income	\$43,512		Renter Median Income	\$21,336	
Homeowner Housing Cost/Yr.	\$7,220		Renter Housing Cost/Yr.	\$8,474	
Homeowner Transportation Cost/Yr.	\$10,623		Renter Transportation Cost/Yr.	\$5,885	
H+T Cost/Yr.	\$17,843 41.0%		H+T Cost/Yr.	\$14,359 67.3%	
Study Area Transit Users	7.4%		Transit Connectivity Index	7.4	
Study Area Race – Resident Workers			Study Area Race – Jobs**11		
White (Including Hispanic)	6,004	79.9%	White (Including Hispanic)	36,819	84.1%
Black (Including Hispanic)	886	11.8%	Black (Including Hispanic)	3,850	8.8%
American Indian (Including Hispanic)	323	4.3%	American Indian (Including Hispanic)	878	2.0%
Asian (Including Hispanic)	163	2.2%	Asian (Including Hispanic)	1,315	3.0%
Other (Including Hispanic)	137	1.8%	Other (Including Hispanic)	900	2.0%
Ethnicity			Ethnicity		
Hispanic-Latino	4,186	55.7%	Hispanic-Latino	12,465	28.5%
Monthly Earnings – Resident Workers*			Monthly Earnings – Jobs**		
< \$1,250	1,927	25.6%	< \$1,250	5,387	12.3%
\$1,250 - \$3,333	3,787	50.4%	\$1,250 - \$3,333	15,170	34.7%
> \$3,333	1,799	23.9%	> \$3,333	23,205	53.0%
Top Four Sectors – Resident Workers*			Top Four Sectors – Jobs**		
Administration+	1,049	13.9%	Public Administration	17,467	41.9%

¹¹ On the Map LODS data for job holders are reported separately by race and ethnicity, so Hispanic job holders are represented twice in this column.

Waste ¹²					
Hospitality	979	13.0%	Finance + Insurance	6,553	15.7%
Health Care	784	10.4%	Hospitality	5,001	11.9%
Retail	816	10.8%	Utilities	1,940	4.6%
Educational Attainment – Resident Workers*			Educational Attainment – Jobs**		
< High School	1,386	18.4%	< High School	4,608	10.5%
High School or GED	1,471	19.6%	High School or GED	8,584	19.6%
Some College - Associate Degree	1,595	21.1%	Some College - Associate Degree	13,166	30.1%
Bachelor's - Advanced Degree	943	12.6%	Bachelor's - Advanced Degree	10,147	23.2%
Educational Attainment N/A ¹³	2,128	28.3%	Educational Attainment N/A	7,257	16.6%
Total Population	7,513	100%	Total Population	43,762	100%

Table II.2 Sources: On the Map LODES, US Census ACS 5 year Estimates 2015, CNT H+T Index

* Resident Workers: workers that reside in the Corridor and may work at any location

** Jobs: holders of jobs in the Corridor who may reside anywhere

Several points in this comparison suggest strategies for overcoming residence-job mismatch:

- *Educational Attainment:* Levels of educational attainment, like earnings, are nearly reversed in the top and bottom categories. Among workers who reside in the Corridor, approximately 17% have not completed high school and only 13% have completed college or an advanced degree. In contrast, workers who hold jobs in the Corridor include fewer than 10% who have not completed high school and 25% with a college or advanced degree. Yet in the middle levels of educational attainment the two groups are more similar. In both groups high school graduation is the highest level of educational attainment for 19% of workers; workers with an associate degree or some college account for 22% of workers who live in the Corridor and 29% who hold jobs there.
- *Public Administration:* The comparison of leading sectors of employment reflects the geographic distribution of jobs within the Corridor. Thirty percent of jobs in the Corridor are in the field of public administration—meaning jobs in government agencies. As the heat map of job density illustrates (Map II.2), the largest job center in the Corridor is in the Phoenix CBD, and that portion of the CBD that falls within the Corridor includes the offices of numerous state and local government agencies.
- *Paraprofessional Employment:* Among the leading sectors of employment, Health Care is the field of 11% of workers who live in the Corridor. Public Service along with Finance & Insurance are leading

¹² The U.S. Census Bureau uses North American Industry Classification System (NAICS) categories to classify workers and jobs. NAICS Code 56 is a broad category that includes Administrative and Support and Waste Management and Remediation Services, meaning “routine support activities for the day-to-day operations of other organizations” including, “office administration, hiring and placing of personnel, document preparation and similar clerical services, solicitation, collection, security and surveillance services, cleaning, and waste disposal services.” Source: U.S. Bureau of Labor Statistics, “Administrative and Support and Waste Management and Remediation Services: NAICS 56,” <https://www.bls.gov/iag/tgs/iag56.htm>.

¹³ Educational attainment in U.S. Census On the Map LODES data is for workers aged 30 or older

sectors among jobs that exist in the Corridor. These three sectors are broad fields of employment that include a variety of paraprofessional positions, which pay a living wage for workers who possess the necessary skill qualifications. Persons with a high school degree, some college credits, or an associate degree might gain skill certifications for these paraprofessional jobs through a community college in a few months and less than two years. While these fields are hierarchical, they include career ladders through which a worker can advance through good job performance and continuing education to full professional status.¹⁴ At least 40% of workers who live in the Corridor have the educational prerequisites to follow such a career path and many may be doing so today. In industrial occupations similar opportunities for skill certification in skilled trades are open to individuals with a basic educational foundation.

The potential for more Corridor residents to make better connections to transit-accessible jobs through paraprofessional or skilled trade training can also be considered in light of information about job demand in Phoenix and a broader range of occupational sectors.

b. Connecting the Corridor Workforce with Regional Employment Patterns

Substantial potential for Corridor workers to connect with regional employment trends through paraprofessional and skilled trade training is indicated by comparisons with the city and regional workforce and by the job projections of the Phoenix Workforce Investment Board.

Comparisons with the worker populations of a broadened buffer area around South Central Avenue, the city of Phoenix, and the metropolitan area, as summarized in Table II.3, strengthen this indication.

¹⁴ Career Ladders Project, for information on programs for career advancement in a number of fields, <https://www.careerladdersproject.org/research-resources/sector-strategies/industry-sectors/health-care-and-medical-technology/> ;

Alan Werner et al, *Literature Review: Career Pathways Program*, OPRE Report #20113-24, U.S. Department of Health and Human Services, June 2013, https://www.acf.hhs.gov/sites/default/files/opre/cp_lit_review_final_62613_edits.pdf

TABLE II.3. CORRIDOR WORKFORCE & REGIONAL EVALUATION

CORRIDOR + REGIONAL COMPARISON	1/2 Mile	%	1 Mile	%	Citywide	%	Metro	%
AREA RESIDENT WORKER EARNINGS								
< \$1,250/month	1,936	25.7%	4,791	26.1%	148,144	22.5%	417,791	22.4%
\$1,250 - \$3,333/month	3,800	50.4%	8,842	48.1%	259,697	39.4%	674,102	36.1%
>\$3,333/month	1,809	24.0%	4,746	25.8%	250,620	38.1%	773,936	41.5%
AREA RESIDENT WORKER EDUCATIONAL ATTAINMENT								
< High School	1,391	18.4%	3,300	18.0%	83,484	12.7%	211,188	11.3%
High School or GED	1,477	19.6%	3,626	19.7%	127,915	19.4%	367,730	19.7%
Some college or Associate's	1,593	21.1%	3,982	21.7%	162,919	24.7%	478,450	25.6%
Bachelor's or Advanced Degree	949	12.6%	2,427	13.2%	128,607	19.5%	385,512	20.7%
Educational Attainment N/A¹⁵	2,135	28.4%	5,044	27.4%	155,536	23.6%	422,949	22.7%
Total All Workers	7,545	100%	18,379	100%	658,461	100%	1,865,829	100%

Table II.3 Source: On the Map LODES. This table highlights the monthly earnings and educational attainment of workers who reside within a half mile radius buffer, one mile radius buffer of the South Central Ave Corridor in addition to the City of Phoenix and Metro CBSA.

Table II.2 demonstrates that enlarging our dataset for the Corridor Workforce to include a one-mile rather than a half-mile buffer around South Central Avenue more than doubles the number of workers under consideration but makes little qualitative difference in the characteristics of the Workforce. Percentage differences between workers in various income and educational attainment categories, whether we are considering a half-mile or a one-mile buffer, are insignificant.

In a comparison of Corridor workers in different income brackets, with the city and the metropolitan area, the Corridor has the highest percentage of workers in a middle-income bracket (47%); numbers of workers in lower and higher income groups are nearly even (26% and 27%). In the city and metropolitan area more workers fall into a higher income category (38% and 39%), and the percentages of workers in the middle bin (39% and 36%) is lower than in the Corridor.

¹⁵ Educational attainment in U.S. Census On the Map LODES data is for workers aged 30 or older

In a comparison of educational attainment, the Corridor workforce has more workers who have not finished high school and fewer college graduates than the city or the metro area. But percentages of high school graduates are virtually identical, and percentages of workers with some college or an associate degree differ within a narrow range.

These observations support the idea that the Corridor workforce, more than the workforce of the city and the region, has a large percentage of workers with lower middle incomes and middle levels of education, who may be poised to take upward career steps through paraprofessional and certified skill training.

The Phoenix Business and Workforce Development Board, in its *Strategic Plan 2017-2020*, documents the fact that Phoenix has one of the nation's fastest growing economies, with rapid employment growth across a broad range of sectors. For the period of 2016-26, The Workforce Board has projected the region's most rapid growth in ten business sectors. At least four of these are fields in which a model of middle-skilled workers finding job openings and opportunities for growth through continuing education is highly applicable:

- Office and Administrative Support Occupations
- Healthcare Practitioners and Technical Occupations
- Business and Financial Operations Occupations
- Healthcare Support Occupations¹⁶

c. Connecting the Corridor Workforce with Industry Sector Opportunities

Information presented in this section considers how workers who live in the Corridor and organizations that support them can relate to surpluses or shortages of jobs in specific industry sectors. Data in the tables presented in this section indicate direct actions, which are noted here and integrated into more systematic strategies in Section C.4.

In the following Table II.4, the two leftmost columns show the breakdown of workers who live in the Corridor by the industry sector in which they are employed. Columns to the right show the jobs that exist in the one-mile buffer around South Central Avenue, the city of Phoenix, and the metropolitan area.

Table II.4 shows local saturation of jobs in several fields for which city and regional demand is high. For example, we have noted that Health Care is one of the largest and fastest growing fields in Phoenix. It accounts for 12.5% of jobs in the city. Health Care is also a field that encompasses numerous opportunities for paraprofessional employment with career ladders to full professional status. Within a one-mile buffer of South Central Avenue, some 2,400 Corridor residents are employed in Health Care, but there are only 2,200 Health Care jobs in the Corridor. In the highly improbable event that every

¹⁶ Phoenix Business and Workforce Development Board, *Strategic Plan 2017-2020, Appendix E: Labor Market Information*, pages 54-64

Health Care job in the Corridor was filled by a local resident, there would not be enough jobs for the Corridor workforce. Although there are four times more jobs of all sorts than workers in the Corridor, local job saturation on a scale similar to that in Health Care exists in other industry sectors including Transportation and Logistics, and Retail Trade, and to a lesser extent in Manufacturing, Management and Waste, and Education.

Two types of strategies are indicated for fields such as these that show high demand and growth potential on the city or metropolitan scale, but saturation within the Corridor:

- Identify employment opportunities in the transit shed extending from the Corridor, i.e., the area that can be reached within a half-hour's travel on public transit.
- Use the ready local workforce as an incentive to attract new employers to the Corridor.

Table II.3 also shows that large local job surpluses also exist in specific industries within the Corridor. Most strikingly, Public Administration includes 31,000 jobs within the one-mile Corridor buffer; approximately 19 times more jobs than Corridor resident workers in this field. These jobs are heavily concentrated within the Phoenix CBD, along with jobs in other professional fields that show a local job surplus including: Finance Insurance & Real Estate (F.I.R.E.), and Professional Science Technology & Information Services. The industrial sector that includes Construction also has a large local job surplus.

Application of basic workforce development agency practices for outreach to employers is indicated for these fields:

- Interview a representative number of employers in each field to learn their requirements for entry level employees and their practices for employee development and advancement, in these cases especially for paraprofessional and support positions.
- Adapt or design programs to meet employer needs; implement programs through securing funding, engaging staff and attracting students.
- Track and modify programs for continuous improvement.

TABLE II.4. CORRIDOR WORKFORCE & CORRIDOR JOBS BY INDUSTRY SECTOR

Industry Sector	1 MILE RESIDENT WORKERS		1 MILE JOBS		PHOENIX		METRO	
	Count	%	Count	%	Count	%	Count	%
Agri., Mining, Oil + Gas, Util., Construction	1,535	8.3%	10,460	12.0%	55,564	6.2%	129,023	6.7%
Manufacturing	1,411	7.7%	3,015	3.4%	47,234	5.3%	123,199	6.4%
Transportation + Warehousing	1,445	7.9%	2,967	3.4%	43,602	4.9%	64,638	3.4%
Retail Trade	1,883	10.2%	1,959	2.3%	86,188	9.7%	238,796	12.5%
Finance Insurance & Real Estate (F.I.R.E.)	1,435	7.8%	10,376	11.9%	89,364	10.0%	164,672	8.6%
Prof., Science, Tech, Info Services	1,095	6.0%	6,300	7.2%	68,500	7.7%	146,255	7.6%
Mgmt., + Waste	2,637	14.3%	4,549	5.2%	123,605	13.8%	213,101	11.1%
Educational	1,209	6.6%	2,166	2.5%	59,883	6.7%	153,841	8.0%
Health Care	2,041	11.1%	1,833	2.1%	111,462	12.5%	247,309	12.9%
Hospitality	2,312	12.5%	12,168	14.0%	83,420	9.3%	222,597	11.6%
Public Admin. + Other	1,376	7.5%	30,737	35.5%	79,930	9.0%	131,473	6.9%
TOTAL	18,379	100%	86,530	100%	848,752	100%	1,834,904	100%

Table II.4 Sources: On the Map LODS. This table highlights number and type of worker living at the Census Block Group level within a half mile and one-mile buffer of the LTR corridor for comparison to the Phoenix and CBSA Metro geographies.

Table II.5 offers a more fine-grained view of job concentrations in station areas within the Corridor. Of course, the Lincoln station area, intersecting with Phoenix CBD, accounts for the major job surpluses noted above, but other station areas have notable job concentrations on a smaller scale. The Buckeye station area contains hundreds of jobs in several fields including: Wholesaling and Freight Transportation, Health Care, and Hospitality. The Audubon or Nina Mason station area holds over 900 manufacturing jobs along with hundreds of jobs in aligned fields -- Utilities and Construction, Wholesaling with Freight Transportation and Warehousing. Broadway, Roeser, Southern, and Baseline each have hundreds of jobs in the retail and hospitality businesses of their Commercial Districts.

Southern is the home of South Mountain Community College, which probably provides many of the 1,900 Education jobs in this area.

**TABLE II.5. STATION AREA JOBS BY INDUSTRY SECTOR
.5 MILE RADIUS**

	Lincoln		Buckeye		Audubon		Broadway		Roeser		Southern		Baseline	
<i>Agri Min Gas Oil Utility Construct.</i>	1,436	4.1%	21	0.8%	456	22.8%	49	6.9%	0	0.0%	5	0.2%	7	0.8%
<i>Manufacture</i>	20	0.1%	179	7.0%	985	49.3%	206	29.0%	22	3.2%	22	0.8%	0	0.0%
<i>Wholesale Transport</i>	699	2.0%	641	25.1%	396	19.8%	11	1.5%	1	0.1%	3	0.1%	9	1.1%
<i>Retail</i>	125	0.4%	71	2.8%	29	1.5%	116	16.3%	244	35.6%	317	12.2%	390	47.2%
<i>Finance Insurance & Real Estate (F.I.R.E.)</i>	6,353	18.1%	57	2.2%	9	0.5%	89	12.5%	67	9.8%	61	2.3%	43	5.2%
<i>Prof Science Tech Info</i>	2,591	7.4%	352	13.8%	4	0.2%	9	1.3%	20	2.9%	21	0.8%	19	2.3%
<i>Mgmt. + Waste</i>	1,183	3.4%	161	6.3%	111	5.6%	7	1.0%	12	1.7%	9	0.3%	120	14.5%
<i>Education</i>	82	0.2%	70	2.7%	0	0.0%	60	8.4%	109	15.9%	1874	71.9%	0	0.0%
<i>Health Care</i>	767	2.2%	466	18.2%	0	0.0%	16	2.3%	73	10.6%	103	4.0%	54	6.5%
<i>Hospitality</i>	4,535	12.9%	432	16.9%	6	0.3%	79	11.1%	123	17.9%	176	6.8%	172	20.8%
<i>Public Admin + Other</i>	17,384	49.4%	105	4.1%	0	0.0%	69	9.7%	15	2.2%	16	0.6%	12	1.5%
	35,175	100%	2,555	100%	1,996	100%	711	100%	686	100%	2,607	100%	826	100%

Table II.5. Sources: On the Map LODES, American Fact Finder ACS 5-year Estimates 2015 data. This table highlights number and types of jobs at the census block group level within a half mile buffer of each proposed LRT station for the South-Central Ave project.

A basic benefit of the South Central LRT will be providing frequent, rapid public transportation linking residents to all the job centers of the Corridor and a springboard to jobs beyond the Corridor that it places within a practical commute.

3. Strategies for Transit-Accessible Job Growth

a. Create a Transit Shed Employment Guide

Create a computer-based analytical tool that will, upon request, present all the employers in a given industrial sector that are located in the transit shed of a Corridor LRT station.

In this paper we have referred to transit sheds, the area within which a person can reach any point using public transit, within half an hour. This is a practical time period for a daily commute or other ordinary travel. For purposes of this recommended tool, transit sheds would be based on the exact location of the LRT stations. These transit sheds will be expanded significantly with construction of the South Central Avenue LRT.

As an example of an existing data source and tool that can be adapted, CNT's web-based analytical tools, such as AllTransit, at <http://alltransit.cnt.org>, are set up to quickly define and map the transit shed of any place in a US urban area, including Phoenix, and issue standard reports on such information as the number of jobs in standard industry sectors within that transit shed. From public records or any one of several commercial databases, it would be possible to supplement CNT's information on a transit shed with basic data on the employers in that geography, sorted by industry sector. A web-based tool set up to provide this information upon request could be termed a Transit Shed Employment Guide.

Such a Guide could have several functions. It would have a general value for workforce program planning. It could provide a systematic means of contacting all the employers in an industrial sector that were relevant to a particular initiative; it would be useful in implementing two other strategies offered in this paper. A version might also be made available publicly, to aid the job searches of individual Corridor residents.

b. Create a Transit-Oriented Development Workforce Initiative

Establish a partnership with a workforce development organization(s), preferably South Mountain Community College, to provide training that includes associate degrees or skill certifications for Corridor residents in selected industry sectors, potentially tailoring these training programs in light of input from prospective employers located in the transit sheds of Corridor LRT stations.

Our analysis of the Corridor workforce demonstrated that these workers, as a group, are most competitive in seeking jobs in the midrange or paraprofessional level of companies or other employer

structures. This status means that an associate degree or skill certifications could enhance their position as candidates and that their opportunities for advancement probably require continuing education.

Our analysis also showed that the largest job concentrations in the Corridor are in the Phoenix CBD and in office-based employment that includes public administration, Finance Insurance & Real Estate (F.I.R.E.), and technical services. Health Care is also an important target industry because of its regional importance and growth, while a smaller job concentration in manufacturing and logistics should also be considered.

For these reasons it will be important for a multifaceted workforce development organization, that can provide paraprofessional and certified skill training in a range of industries to make a strong commitment to building the Corridor workforce. The logical primary partner for this role is South Mountain Community College -- a large, state and regionally sponsored community college with some forty associate degree and skill certification programs, including concentrations in health care, computer technology, accounting, office management, and manufacturing. South Mountain is located in the Corridor and has a long record of service to the community.¹⁷

A novel approach that the community would ask South Mountain and any other workforce development partners to adopt would be targeting prospective employers, in part, on the basis of transit access. Like other leading community colleges, South Mountain communicates closely with a broad network of employers that receive many of the College's graduates and provide input into the selection and design of training programs. These employer partners are selected in part by their proximity but also because of their position in industry clusters that align with program interests. To these criteria, the College should be asked to include transit access for Corridor residents. In implementing this request, executing the strategy noted above, for development of a Transit Shed Employment Guide would be helpful.

In CNT's experience, workforce development organizations generally acknowledge the importance of transit connections in securing jobs for their clients but do not often systematically incorporate transit into their programs. An exception is the Linden community service and transit center, in its relationship with Columbus Community College. The Transit Center was established in 1999 in Linden, an inner-city neighborhood of Columbus, Ohio. At the time of the center's opening, Linden had suffered from many years of disinvestment. According to David Baker of the Columbus Urban Growth Corporation, nearly a quarter of the neighborhood had no access to automobiles and unemployment was high. The transit station which serves as a hub for multiple intersecting bus routes and a neighborhood shuttle, helps connect car-less residents of Linden to employment opportunities elsewhere in the city. In addition, over the past 18 years, the Central Ohio Transit Authority (COTA), along with private companies, such as Fed-Ex and Riverside Methodist Hospitals have experimented with fixed bus routes from the transit center to their job locations, helping to increase access to jobs for Linden residents. The transit center not only serves as a transportation hub but also contains additional amenities for the neighborhood, including a children's daycare center and medical clinic, Columbus' Department of Neighborhoods and other community service organizations.

¹⁷ South Mountain Community College, <http://www.southmountaincc.edu/>

In 2017 COTA completed a three-year analysis and reorganization of its route system; with the primary objective of achieving better connections between disinvested communities and job centers. One of the new assets created in the implementation of this plan is Columbus's first Bus Rapid Transit (BRT) Line, named CMAX. This BRT runs along the Cleveland Avenue Corridor with the Linden Transit Center and Columbus Community College (a major workforce training institution, 1.8 miles from Linden) among its major stops. With this proximity and high-frequency transit connection, Columbus Community College serves as a training center for workers who find employment in the businesses connected to the Linden Neighborhood by transit.¹⁸

c. Conduct a Pro-Transit Riders Initiative

This multi-faceted initiative should be aimed at encouraging use of the LRT and other Valley Metro services in the Corridor, particularly by households that need to become transit users in order to find new employment and/or otherwise secure their financial position. Components of the initiative would include:

- *A neighborhood transit pass that may be specially discounted and promoted*
- *An employer and commuter outreach program aimed at providing the full financial benefits of transit use for Corridor transit commuters*

Neighborhood Transit Pass

Valley Metro currently has a modestly priced monthly pass and offers specially discounted pass programs for employers and Arizona State University students. However, for the introduction of the LRT to the Corridor and perhaps for use in other communities, Valley Metro and the City of Phoenix are advised to consider a Neighborhood Pass program based on the model of the Neighborhood Eco Pass program of Boulder, Colorado. In the Boulder program neighborhoods that pass a threshold of participation are offered monthly passes at a steeply discounted rate for all households in a defined area.¹⁹ Introduction of a neighborhood pass program in the new LRT Corridor would generate several benefits of particular value. It would convey an attention-getting message to households that may not otherwise be informed of the transit service and cause them to learn more and understand the scale of benefits that transit use could bring to their lives. As the program was promoted in the community, it would generate positive conversations about the new service and optimally ignite community spirit for a collective effort to meet threshold requirements.

As an alternative to a neighborhood pass program, Valley Metro could consider the extension of a program comparable to Employee Platinum Plus, to the owners of apartment buildings for the use of tenants, with the building owner taking the role an employer and tenants as employees. Such a program could be an especially valuable feature in affordable housing development and retention.

¹⁸ Central Ohio Transit Authority (COTA), published information regarding the CMAX bus rapid transit line <https://www.cota.com/initiatives/cmax-bus-rapid-transit/> and interview with Douglas Arseneault, Senior Planner, COTA, November 7, 2018

¹⁹ City of Boulder Colorado, Neighborhood Eco Pass Program, <https://bouldercolorado.gov/goboulder/neighborhood-eco-pass>

In a related effort, Valley Metro is encouraged to enroll retail and service businesses in the Corridor as vendors of the monthly pass or other fare media. Such engagement would help to build good will for the transit system as well as wider use.

These recommendations are also discussed in Paper III of this series in regard to developing an eTOD community.

Employer and Commuter Outreach Program

Community organizations that provide support for small businesses in the Corridor as well as Valley Metro are advised to conduct systematic outreach to Corridor businesses to ensure they are aware of all the options by which they and their employees can benefit from transit.

Employee Platinum Plus: This program of Valley Metro's that provides discounted transit passes to employees and is available to firms with as few as five employees should be aggressively promoted throughout the Corridor.²⁰ Valley Metro is encouraged to engage the community organizations that support small business development in the Corridor as emissaries of this program.

Provide Transit Expense Fringe Benefits: An employer may give an employee up to \$260/month for transit, car-pooling, or parking expenses. With revisions in the "Tax Cut and Jobs Act of 2017", if an employer provides these dollars as a tax-free fringe benefit, the employer cannot claim these costs as a tax-deductible expense. Alternatively, if the employer counts this benefit as taxable W-2 wages, the employer can deduct the expenses of providing this benefit.²¹

Provide the Option of Pretax Transit Purchases: An employer may allow an employee to use up to \$260/month to pay for transit vouchers, commuter highway vehicle fares, or parking. An employer may reduce its payroll tax contribution for an employee's pretax income used for this purpose.²²

Explore Shared Mobility Options.

Programs such as car sharing and bike sharing are increasingly popular modes of transportation that are frequently coordinated for individual users, employers, or apartment building owners. These services that can make a car or bike available at need often permit an employee the freedom that he or she desires to commute by transit. The national Shared Use Mobility Center is a source of information re the organization of such programs.²³ <http://sharedusemobilitycenter.org/> .

²⁰ Valley Metro, Employee Platinum Plus <https://www.valleymetro.org/employee-platinum-pass>

²¹ National Center for Urban Transportation Research, <https://www.nctr.usf.edu/programs/clearinghouse/commutebenefits/>

²² Ibid

²³ Shared Use Mobility Center, <http://sharedusemobilitycenter.org/> .

D. Building Businesses & Jobs in the Corridor

1. Corridor Land Use and Land Management

a. Rationale

Planning for development leading to job and wealth creation in any area require an understanding of current land use and a strategy for influencing changes in land use in support of planned development. Obviously, a project that involves constructing or rehabilitating a building would not be capitalized until the conditions and values of nearby properties were understood, and the project's execution would affect these same conditions of nearby properties. Similarly, infrastructure projects -- from building the LRT to shading a residential street -- will be justified by an understanding of current land use and its impact on land use and values. A project that would manage neglected and vacant property to prevent it from degrading surrounding property values would be primarily concerned with desirable land use. Even projects that do not change physical conditions directly will have land use justifications and consequences. For example, a project that provides technical assistance to business owners or training for workers could well determine whether businesses succeed or fail, with significant results for land use and value. Accordingly, this project that plans for eTOD in the entire Corridor needs to be grounded in an accurate general understanding of the Corridor's land use.

The City of Phoenix and Maricopa County have provided extensive data on existing land use in the Corridor. This section of the paper uses public data to present an overview of Corridor land use, providing background for a strategy to influence land use in support of eTOD in the Corridor. A subsequent memo will provide further analysis of land use, which will be used in estimating the potential scale of development that could occur with successful eTOD implementation.

The Corridor, defined as a buffer one half mile on either side of South Central Avenue, contains approximately 3,345 acres of land that is not devoted to infrastructure or other public use, such as infrastructure, parks, or schools. This land is distributed among five major categories of use as illustrated in Chart II.3. The predominant use of land is Residential with zoning for Multifamily (875 acres) and Single Family (696 acres). All these residential neighborhoods are served within the half-mile buffer of the Central Avenue Commercial Districts (598 acres). Commercial land, along with land in the Downtown (377 acres) and Industrial areas (799 acres) allows for the substantial job development reflected in the 6:1 ratio of jobs to employed residents in the Corridor.

Chart II.3. Acres of Land and Vacant Land by Zoning Type

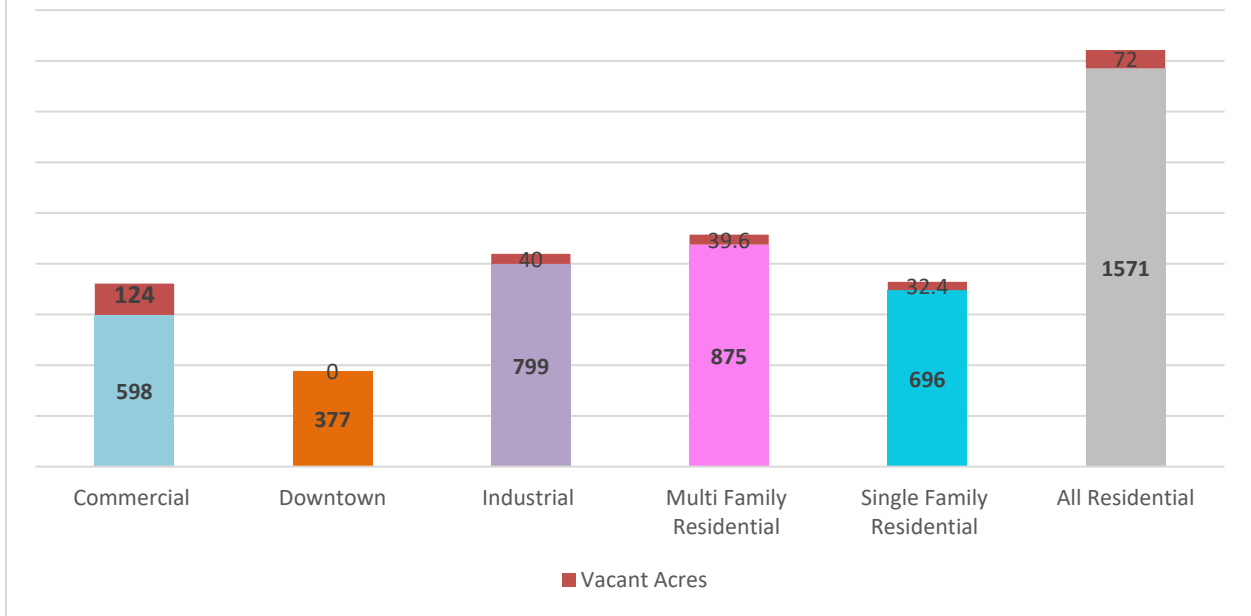
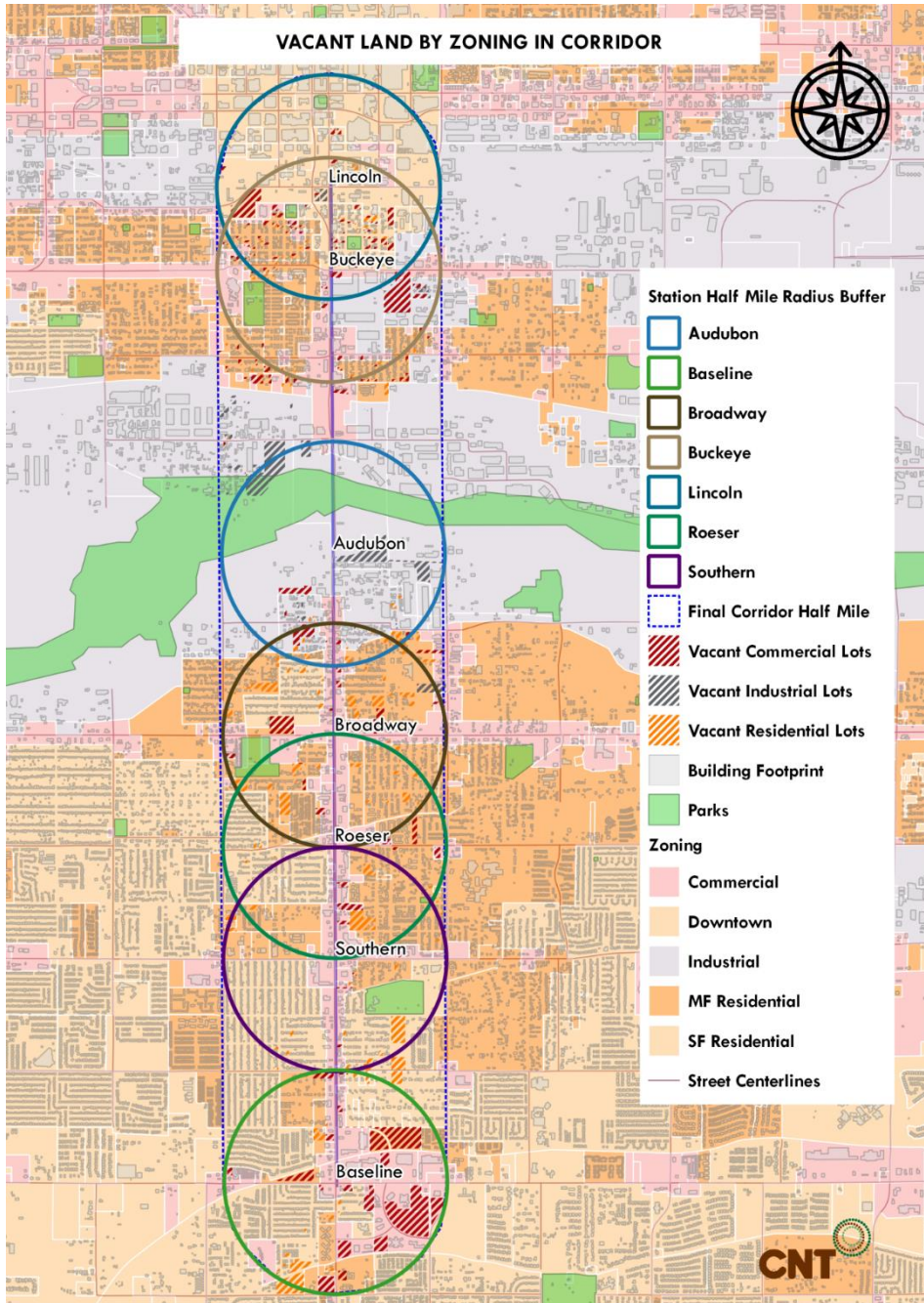


Chart II.3. City of Phoenix Data Portal, Coordinate Reference System (CRS) EPSG 2223, NAD 83/Arizona Central, Maricopa County Assessor’s Office

In Map II.3 we see the broad pattern of land use change as the Corridor runs from north to south. Most of the Lincoln Station area is in Phoenix’s Downtown Zone. The Buckeye Station area, including its substantial area that overlaps with Lincoln, has a mix of uses including Multifamily Residential, Industrial, and Commercial. Audubon is largely Industrial and Park land. Broadway, Roeser, and a portion of the Southern station area contain extensive areas zoned for Multifamily as well as Single Family Residential use. The Southern and Baseline station areas are predominantly Single Family Residential.


Map II.3. Vacant Land by Zoning in the Corridor



Map II.3. Vacant Land by Zoning in Corridor Sources: City of Phoenix data portal, Maricopa County Assessor’s Office. This map shows City of Phoenix Zoning and current vacancies within study area corridor, station areas using half mile radius buffer.

A matter of critical concern for development within the Corridor is the amount and location of vacant and under-utilized land. Maricopa County records classify approximately 236 acres of land as vacant, approximately 7% of all land in the Corridor not in public ownership infrastructure, parks, or schools. Public records also show vacant buildings in the Corridor, the breakdown of zoning for these properties is shown in Chart II.4.

CHART II.4.



CORRIDOR: VACANT BUILDINGS

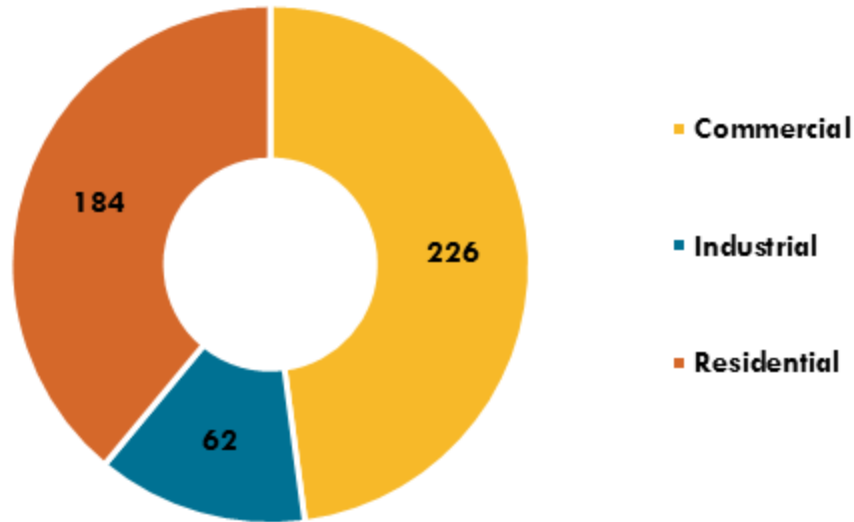


Chart II.4. City of Phoenix Data Portal, Coordinate Reference System (CRS) EPSG 2223, NAD 83/Arizona Central, Maricopa County Assessor’s Office

Street views of the Corridor indicate that a considerable percentage of its properties are under-utilized, meaning that the land is not totally empty but it appears that the value of structures is less than 20% of the total assessed value of the property. In some other urban areas, assessor records provide a clear basis for classifying such properties as under-utilized, but a basis for systematically classifying under-utilized property in Maricopa County is not obvious. CNT is continuing communications with the County and City to identify a method for classifying under-utilized property, and CNT will update this paper, when this method is determined.

Vacant and under-utilized real estate parcels are the properties that Corridor communities and their supporters are most likely to target for new job-producing uses, needed amenities, and affordable

housing. These are also the properties most likely to be acquired by private developers whose projects may add to community wealth but also lead to displacement, especially if there is not community awareness of the project at an early stage of planning.

Accordingly, an important strategy for the Corridor to develop a capacity to carefully track vacant and under-utilized land at the parcel level, acquire land that is abandoned or otherwise severely neglected, maintain or improve vacant properties, and convey them to private investors who will execute projects in the public interest. In dozens of urban areas around the county, these functions are performed by land banks. Land banks are frequently not-for-profit organizations that work closely with local government; in some cases, local governments own the land bank or perform land bank functions without creating an entity dedicated to this work. Land banks are sometimes given authority in state statutes that permit the land bank to take a favorable position in the disposition of properties that are abandoned or whose owners are in default of tax obligations. While such authority can be useful to the operation of a land bank, it is not an essential requirement for performing most land bank functions. Nationally, leading non-profit organizations that counsel local governments and community organizations in the development and successful operation of land banks include the Center for Community Progress and the Center for Creative Land Recycling.²⁴

Land banks are also discussed in Paper IV of this series, along with other public policy strategies that can be used to achieve eTOD. As this paper points out, no land banks now exist in Arizona. The City of Phoenix owns some 4,100 individual properties covering 2.3 miles throughout the city, and 25 of these properties are in the Corridor. Arguably, the City of Phoenix and Maricopa County have the ability to bank property and accelerate its preparation and sale in high priority areas.

b. Strategy - Explore Development of a Land Bank

The City of Phoenix, in collaboration with community organizations in the Corridor, should consult with one or more of the national organizations that provide guidance in the establishment of land banks (such as the Center for Community Progress or the Center for Creative Land Recycling) re the issues and process involved in creating a land bank for the purposes of tracking vacant properties and, as necessary, acquiring, managing and improving vacant properties to return them to productive use in the interest of the community. The Corridor should be treated as a pilot area for the development of a Phoenix land bank.

In the event that the development of a Phoenix land bank organization would be determined to be infeasible or subject to long delays, the City should determine how it can perform as many land bank functions as possible, establish a program to perform this work, and plan and implement this program in collaboration with community organizations in the Corridor and possibly other City-wide not-for-profit organizations engaged in equitable development.

²⁴ Center for Community Progress, <https://www.communityprogress.net/>; Center for Creative Land Recycling, <https://www.cclr.org/>; Organizations that each have a mission and successful track record in supporting the development of land banks.

2. Production Businesses & Job Growth

a. Rationale

The broad category of “Production Jobs” encompasses a number of occupation classifications of the North American Industrial Classification System (NAICS) system. In addition to manufacturing and logistics, production jobs fulfill the need for skilled and semiskilled manual labor in tasks that are necessary for the maintenance of a city and especially a CBD, e.g.: building construction and maintenance, the operation of utilities, office machinery supply and maintenance, printing, and the expedited delivery of packages. Production functions are commonly considered to be compatible land uses and share industrially zoned areas. In some space-constrained cities, such as San Francisco and Washington DC, production activities have been largely replaced within city boundaries by dense residential and commercial development. But even these cities have recognized the necessity of preserving land for production businesses close to their CBDs and created special zoning and land use policies to ensure their preservation.²⁵

Besides performing necessary functions for the life of cities, production businesses contribute to the equity of a city’s economy and society. Large sectors of production workers earn higher incomes than other workers with similar levels of education. Even though temporary staffing firms have eroded manufacturing wages in recent years, manufacturing workers are currently payed approximately 13% more per hour than other workers with comparable educations, and they are far more likely to receive benefits.²⁶ Earnings in skilled building trades generally exceed manufacturing wages.²⁷ In manufacturing, construction trades, and more recently in logistics, training programs that confer skill certifications are well developed and widely recognized, so it is feasible for entry level workers to climb a career ladder through job experience and continuing education.²⁸ For all these reasons, employment in production industries is an important component of jobs to be retained, increased, and well connected to public transit in the further development of the Corridor.

²⁵ District of Columbia, PDR Handbook

<http://handbook.dcoz.dc.gov/zones/production-distribution-and-repair/>

PDR Zones San Francisco

<https://sf-planning.org/sites/default/files/FileCenter/Documents/4893-CW DPR chapter5 2.pdf>

²⁶ Lawrence Mishel, “Yes, Manufacturing Still Provides a Pay Advantage, but staffing firms and outsourcing are eroding it.” Economic Policy Institute, March 2018, <https://www.epi.org/files/pdf/141193.pdf>

²⁷ Bureau of Labor Statistics, *Employment and Wages by Occupation*, May 2017

²⁸ These sources provide an introduction to the extensive literature on standardization and skill certification in production businesses: International Organization for Standardization (ISO), *What Does ISO Mean in Manufacturing*, <https://www.isocertificateonline.in/iso-mean-manufacturing/>; National Association of Home Builders, *Careers in the Construction Trades*, <https://www.nahb.org/en/industry-professionals/careers-in-the-trades.aspx>; <file:///C:/Users/david/Downloads/construction-careers-ladder.pdf>; Charlotte Works, *Introduction to the Transportation and Logistics Career Pathway*, <http://www.charlotteworks.com/industry-data/career-pathways/transportation-logistics/>; Perkins Collaborative Resource Network, *Career Pathway Systems*, US Department of Education, <https://cte.ed.gov/initiatives/career-pathways-systems>

Production businesses and jobs do not predominate in the Corridor, but they are a significant part of it. Of the 44,500 jobs within the half-mile radius buffer of Central Avenue, approximately 5,100 or 11.5% of these jobs are in production businesses (as presented earlier in Table II.5 of this report). Of the 3,345 acres of land in the half-mile radius buffer around Central Avenue, approximately 799 acres or 24% of the Corridor's land is zoned for industrial use. Over 95% of these production jobs and industrial acres are located in three station areas: Lincoln, Buckeye, and Audubon. Approximately, 40 acres or 5% of the industrially zoned land is vacant; however, a larger amount of industrially zoned land may be underutilized.

b. Strategy -- Undertake a Sector Study

Not-for-profit organizations that support small business development in the Corridor should work with the City of Phoenix Department of Development to help the production business sector and the existing industrial districts of the Corridor reach their full potential as centers of employment, which are effectively served by public transportation. In pursuit of this strategic objective, a plan for the development of the Corridor's production businesses and industrial districts should be created. The planning process and its product should include the following elements:

- A representative number of production business owners\managers should be interviewed to learn their development objectives and perceived impediments to growth.
- The Downtown Phoenix Partnership and parties that the Partnership might recommend should be consulted re the need for service from production businesses to better support the growth of the Phoenix CBD.
- The workforce development partners who will assist the continuing education and job placement of the Corridor workforce (per the strategy proposed in Section II.C.2 above) should be engaged in the development of the plan, including interviews with production business owners\managers.
- In keeping with the recommendation for the formation of a Phoenix Land Bank (per the strategy proposed in Section II.D.1. above), vacant and severely underutilized industrial land should be cataloged and mapped and plans made for its return to productive use.
- Broader industrial development objectives and plans of the City should be considered to define the place of the Corridor's production businesses and industrial districts in the City's overall development strategy.
- Valley Metro and appropriate city agencies should determine what actions are needed to create safe and convenient "last mile" access between the Corridor LRT stations and production business workplaces, either through walkways or a viable form of shuttle transportation.

3. Construction Business & Job Growth

a. Rationale

An expanding CBD and the new South Central LRT will predictably drive demand for the construction and rehabilitation of buildings in the Corridor. New construction will include market rate residential development and not-for-profit development to build affordable housing. The rehabilitation and construction of commercial buildings in the Corridor can also be expected to generate construction work

as business owners adjust to the changing market and additional business from a growing population. A subsequent analysis by CNT will estimate the scale of this growth.

Approximately 1,700 workers who reside in the one-mile radius buffer on either side of South Central Avenue (8% of this Corridor resident workforce) are employed in the production business category that includes utilities and construction. Approximately 10,500 jobs, 11.6% of the jobs within the same buffer, are in the construction and utilities business category. As the construction industry in the Corridor expands, it is likely to generate a significant number of jobs.

Corridor organizations that support local business are likely to include building construction firms in the survey they are currently conducting. To ensure that construction firms are included in the survey, the survey's implementers may contact the American Minority Contractors of Arizona (AMCA) <http://amcaaz.com/contents/> to identify AMCA members based in the Corridor.

b. Strategies -- Prepare a Construction Firm Database

The following actions are recommended to optimize the number of Corridor area residents who will find employment in building construction:

- Advocate for the inclusion of local and minority contractors and workers in new construction proposed in the Corridor.
- Create, maintain, and promote a database of minority and local building contractors and skilled workers who can be recommended to perform good work in building construction.
- Include building trade workers in the paraprofessional and skilled workforce development initiatives targeted to Corridor residents, per proposed Strategy II.C.1 & 2. above.
- Include building trade contractors in the support services for small business owners, per proposed Strategy II.D.4.

4. Retail & Service Business, Retention & Growth

a. Rationale

(1) A Major Component of the Corridor Economy

The South Central retail sector and closely related hospitality sector are important to the Corridor, showing signs of weakness that must be immediately addressed, and subject to improvement through eTOD. The federal data presented earlier in this paper (Section C.2.c, Tables II.4 and II.5.) showed that approximately 23% of workers who live in the Corridor are employed in retail or hospitality businesses and that 16% of jobs in the Corridor are in these sectors. Additional data on the half-mile radius buffer area of the Corridor, gathered by the City of Phoenix and presented in the following table, reinforce these findings. Retail and service businesses provide substantial percentages of the jobs in the Corridor, and they are a larger part of the community economy in the southern station areas that have few other employers.

TABLE II.6. RETAIL + SERVICE BUSINESS EMPLOYMENT

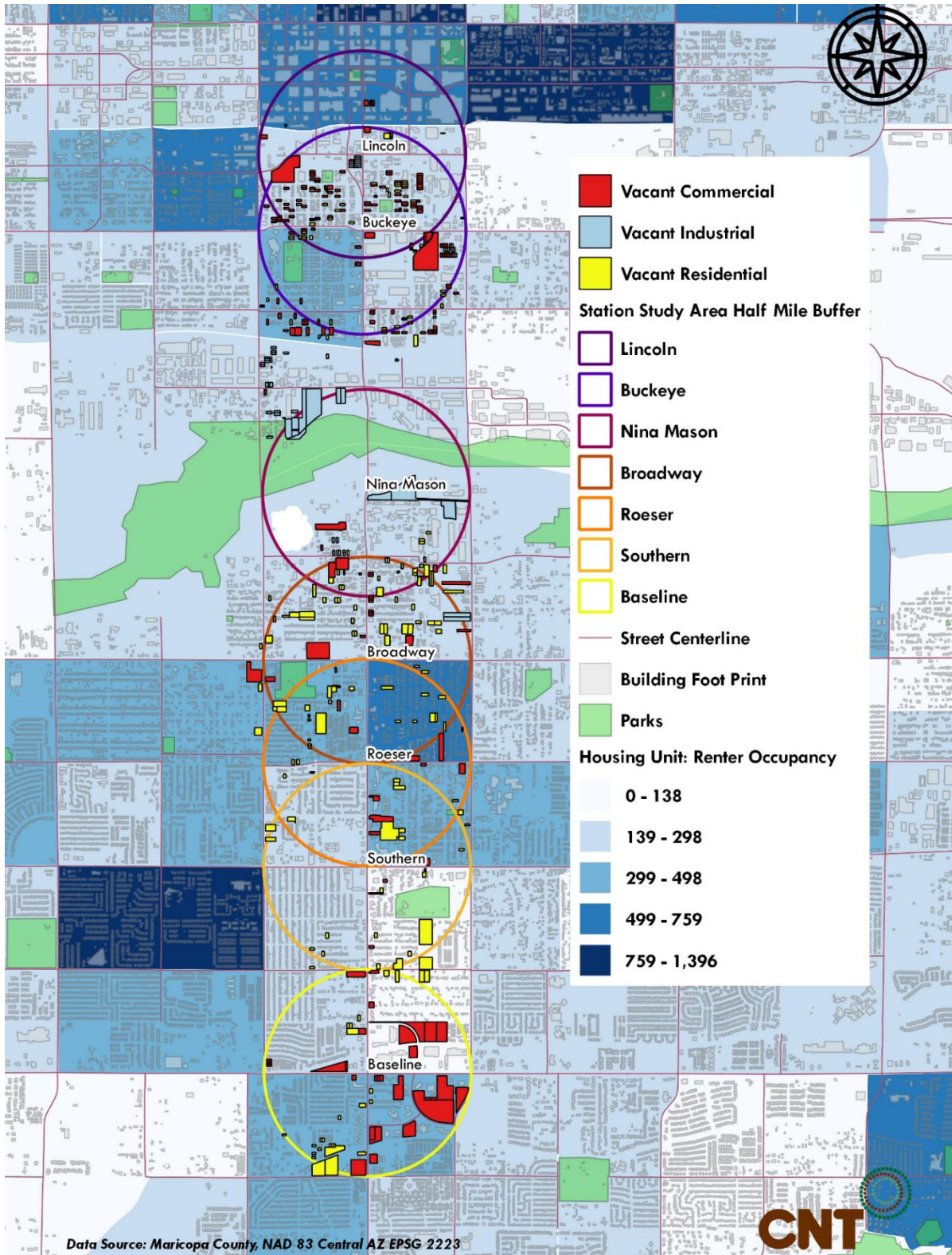
Station Area	Businesses	Employees	Percent of Employees
Lincoln	12	281	18.9%
Buckeye	10	105	7.1%
Audubon	2	17	1.1%
Broadway	8	120	8.1%
Roeser	10	275	18.5%
Southern	11	294	19.7%
Baseline	12	397	26.7%

Table II.6. Sources: City of Phoenix, half mile radius buffer of employer data within each station area.

Alarming Vacancy Rates

Commercial properties in the Corridor have high percentages of vacant land relative to other classes of property in the Corridor, as our earlier discussion of land use in the Corridor demonstrated (Section D.1. Charts 3 & 4). Commercial acreage in the Corridor has a 20% vacancy rate compared to a 7% rate for all property classes. Also, out of 472 vacant buildings in the Corridor, 226 are commercial. As the following map illustrates, vacancies of commercial property are more widespread in the southern station areas, where retail and hospitality businesses are larger parts of the community economy. Such high vacancy rates indicate that the Corridor's retail and hospitality sectors have been overbuilt for the share of the local market that they can currently capture.

**Map II.4. Vacancy within Half Mile of S Central Avenue
Light Rail Corridor**



The significance of weakness in the Corridor's retail and service businesses goes beyond risks to the owners and employees of these firms. As we discussed in Paper I of this series and elaborated in Paper III on community building in eTOD, vital commercial districts surrounding transit stations are essential for TOD. These districts meet many of the daily needs of neighborhood residents and commuters and make reliance on public transit and reduction of transportation costs possible. Also, businesses along a transit route and arterial roadway are the face of a community. Numerous empty commercial lots and vacant buildings convey a discouraging message to investors and to prospective new and current residents.

(2) Small Business Retention and Immediate Support

Given current vacancy rates, a program is indicated to assist small businesses in the Corridor with their most pressing issues. The business support group within the project planning team is now conducting business owner and customer surveys and extensive interviews with business owners to identify these issues. Short-term strategies for supporting Corridor businesses will be guided by the findings of this research, but from the perspective of CNT's national experience in eTOD, we suggest that the following topics should be addressed in the immediate retention plan.

Coping with LRT Construction: Any major construction on the arterial road that fronts a retail or service business will negatively impact sales during the construction period. In other successful transit system developments, such as construction of the first Portland streetcar line, these impacts have been mitigated by a committee of directly affected business owners working closely with construction management. In Portland this collaboration helped to minimize the extent and duration of disruption on each segment of the line and to communicate with the public about the construction.²⁹ Formation of a similar collaborative committee is suggested for the LRT construction.

Competition with Regional Shopping Centers: A widely recognized problem for Corridor merchants is that large regional shopping centers, miles away but conveniently connected by highways, are drawing off sales. Basic solutions to this problem are long-term and include reorientation to growing local and transit-connected markets and strengthening anchor businesses within each station area. However, mitigating actions, such as special promotions on South Central Avenue linked to the opening of the LRT may help to compensate for competitive pressures in the short term.

One-to-One Counseling Assistance: The owner operators of small businesses face a daunting daily reality -- understanding how myriad market developments affect their business, managing employees, relating to customers, deciding how to allocate limited resources in order to achieve sales and bottom-

²⁹ Gloria Ohland and Shelley Poticha, *Street Smart, Streetcars and Cities in the Twenty-First Century, The Business Point of View, Michael Powell and Powell's Books in Portland*, pages 61-2.

line improvements. For business owners who live this daily reality, there is no substitute for a trusted advisor who thoroughly understands the owner-operator's unique business and provides guidance.

The efficacy of such counseling relationships is demonstrated by successful franchise networks and by the SCORE mentoring program affiliated with the US Small Business Administration (SBA). Virtually every successful franchise system employs district managers assigned to 5 to 40 franchise units (depending on the complexity of the business). A small part of the work of these district managers is to enforce the standards of the franchise system, but their true job is to sit down with each franchisee on a regular basis, talk through the issues facing his or her business, develop continuous improvement plans, and work with the franchisee through the implementation of these plans. The experience of national consultants is that franchisors that adequately staff and reward the district manager function have very high success rates among their franchisees, while franchise networks that underfund this function typically decline.³⁰

Similarly, the US Small Business Administration (SBA) maintains a close relationship with the not-for-profit organization SCORE, a membership organization of experienced business managers and executives who volunteer to provide mentoring relationships for small business owners. Support from SCORE counselors is comparable to the service that district managers provide to franchisees. Although this support is voluntary, it typically continues for as long as the business owner and SCORE volunteer think it is worthwhile. The SBA has maintained and expanded the SCORE relationship for more than 50 years, and SCORE has grown to include some 10,000 members in 300 chapters across the US, including an active chapter in Phoenix.³¹

(3) Adjusting to a Broader Market

The long-term solutions to the problems of the Corridor's small businesses lie in adjusting to a new market situation. With the introduction of the LRT, the Corridor's retail and service businesses will effectively be adding a new market, with several major components, to their current customer base:

- The broad urban market of customers who can reach their business within half an hour by transit
- Customers from nearby communities that will come to the Corridor to connect with LRT, sometimes arriving by bus or cycling
- The growing population of residents within a half-mile radius who have an interest in patronizing their community businesses and will often arrive by walking or cycling

Reaching a Broader Customer Base through Transit

³⁰ Interview with Mark Siebert, President, I-Franchise Group, September 2018, <https://www.ifranchisegroup.com/>

³¹ Information re SCORE from the organization, <https://www.score.org/> and from the US SBA <https://www.sba.gov/tools/local-assistance/score>, and from the Phoenix SCORE Office <https://greaterphoenix.score.org/content/find-mentor-287>

Transit puts businesses in potential contact with a broad customer base. Earlier, we described the notion of a transit shed -- the area within which a person can reach any destination, using public transit, within half an hour. We found that with current bus service a traveler from any point in the Corridor could reach tens of thousands of jobs within half an hour; the Central Avenue LRT will substantially expand these transit sheds. Similarly, retail businesses have a transit shed through which tens of thousands of customers could reach their stores within half an hour using transit. The following chart shows the numbers of customers who can reach each of the Corridor station areas within half an hour using current bus services. These numbers of potential customers could expand significantly once the LRT is operating.

CHART II.5.

Customers within 30 minute transit commute

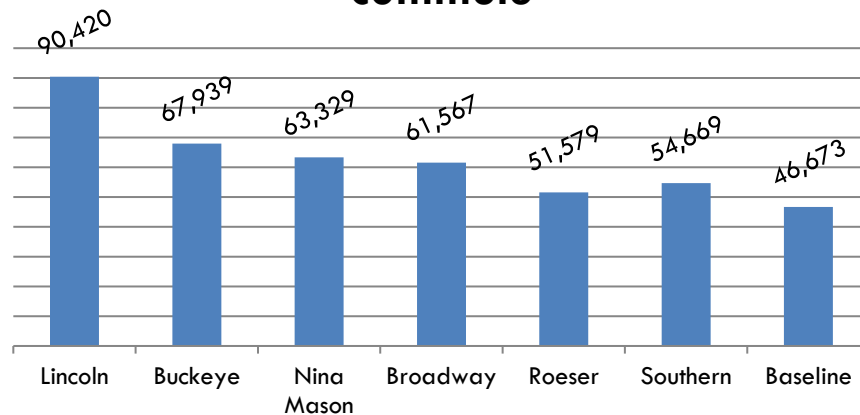


Chart II.5 Source: AllTransit™. This chart shows the number of jobs available to station area residents using existing transit systems within a 30-minute commuting time frame.

Although transit creates the potential for contact with a broader customer base, customers will need strong reasons to travel by transit to retail locations that they might not ordinarily visit. To provide these reasons the business owners of each transit station area and their supporters will need to collaborate in planning and implementing a commercial district development and marketing strategy. Optimally, these plans will be based on an in-depth retail market analysis of the Corridor, including each station area as a submarket. Research now underway by members of the Business Assistance Team may fulfill this need.

It is likely that the commercial district development plans for the Corridor will identify anchor attractions or groups of point-of-destination businesses that will draw customers via transit to each station area district. These anchors may include the Nina Mason Pulliam Rio Salado Audubon Center and South Mountain Park, South Mountain Community College, a regularly convened farmers market or craft fair,

or several outstanding restaurants or specialized retail stores. The station area commercial development program may entail the upgrading of some existing businesses or the attraction of new businesses to provide the anchors needed to draw customers to convenience retail and service businesses.

In making such plans it would be useful to consider that a large part of the target market for Corridor businesses will be concentrated on the LRT and the Phoenix CBD. Because of its concentration, this market can be reached readily by continuing market messages on the LRT and in the Lincoln station area. These plans should also cross reference the Pro-Transit Rider Initiative, presented above as a strategy for helping more Corridor residents use transit to connect with job opportunities, commute, and perform other essential travel needs (Section II.C.3.c.). Strategic elements proposed in this strategy include instituting a community transit pass and marketing transit passes through station area retailers.

Integrating with Community Development Efforts

Besides connecting with a broader market through eTOD, Corridor retail and service businesses will have a growing market in their immediate communities. Collectively, business owners in each station area should be aware of their role as the providers of a variety of essential goods and services for the population that will want to walk to them regularly. In station area retail district planning the business community should seek to maintain or attract the variety of businesses that will enable their district to perform this role.

As part of the eTOD community facing effort, station area businesses and their supporters should also collaborate with efforts of the City, residential developers, and neighbors to make adjoining streets and public areas green and walkable. Just as proprietors are accustomed to providing parking for their customers (which they will continue to do), they should also recognize the need and opportunity to draw customers from the nearby transit station and walkable neighborhood that includes them. Encouraging these potentially frequent customers to stop may require contributions to green streets and public walkways leading to their doors.

The efforts in planning, marketing, and infrastructure required from the business owners of each station area to optimize the success of their community's eTOD will necessarily be made collectively. The collaboration needed for these efforts may be achieved most efficiently by establishing a Phoenix Business Improvement District in each station area, with the districts coordinated by a Corridor Business Council.

Capturing the Middle-Distance Community Market

Corridor businesses now draw part of their customer base from what may be termed middle-distance neighborhoods, relative to Central Avenue. These areas are farther from Central Avenue than a person would typically walk in good weather (more than half a mile) but not so distant that residents gravitate to a different retail district for convenience shopping (generally less than 2 miles). Today most of these customers drive to Central Avenue, although some come by bus on any one of the major avenue routes that cross Central going east or west. With the advent of the LRT, more of these "near neighbors" will be

coming to Central Avenue to catch the LRT, and more of them will be connecting by bus, since they will be performing a leg of their journey by transit.³²

Corridor businesses may turn these visitors into customers through a combination of the measures used to draw customers from throughout the transit shed and to serve the immediate, pedestrian-oriented market. As each station area commercial district establishes anchor businesses and a mix of convenience businesses that will meet daily needs, it will become a district that nearby community customers will recall when they are not taking transit. As each station area establishes a green and attractive outdoor environment near its business entry ways, these environments will attract transit riders transferring to or from the LRT to linger and shop. As businesses in the transit station areas are experienced and remembered as attractive places, they will continue to draw middle-distance community residents, even when they are not taking transit.

Attracting Major Employers

A further step that Corridor business owners and their supporters may take to build their markets through eTOD opportunities is to advocate for the attraction of major employers to the Corridor. One of the LRT's significant contributions to the Corridor's economy is to make its business sites moments away from the Phoenix CBD via a mode of transportation valued by many businesses and their employees, including millennial knowledge workers. Employers that want to relate closely to CBD and Arizona State University (ASU) but seek a less expensive location may be attracted to the Corridor with its LRT service. Such prospective employers may include:

- Public sector offices as they expand or move from the CBD
- Businesses now common in the CBD -- such as financial, insurance, and real estate (FIRE) firms -- that may want to relocate some back office functions out of the CBD to conveniently accessible locations
- Medical services possibly attracted by the programs of South Mountain Community College and the high proportion of trained health care workers in the Corridor workforce
- High tech manufacturers and software companies that are attracted to the Phoenix area and may seek locations a short LRT ride from the CBD and ASU.

The location of such businesses will require the identification and preparation of sites. Our overview of Corridor land use (Section D.1.) noted a low overall vacancy rate, but a high rate of vacancy in commercial zones and a currently unknown but possibly significant amount of under-utilized property. A next step in an effort to attract major employers to the Corridor would be an in-depth analysis of vacant and under-utilized land leading to the identification of sites for new businesses.

³² The Center for Transit Oriented Development published two relevant reports on transit and employment: "Transit-Oriented Development (TOD) and Employment," 2011. <http://reconnectingamerica.org/assets/Uploads/TODandEmploymentFINALMay2011.pdf> and "Transit & Employment: Increasing Transit's Share of the Commute Trip," 2008. <http://reconnectingamerica.org/resource-center/books-and-reports/2008/tod-202-transit-and-employment/>

b. Strategies -- Retention & Market Growth

Any strategies for the development of retail and service businesses arising from this analysis will need to be harmonized with the findings of the business retention and development group of the project planning team, which is currently conducting research. Subjects to consider in melding eTOD strategies with the business support group's findings include a summary of the measures discussed in the preceding rationale:

- Immediately establishing a business retention and support program for small business owners that will include an organized program to minimize disruption during the LRT construction period and the offer of one-to-one counseling services for small business owners
- Connecting with the large customer base accessible through transit, by promoting unique public resources and developing and marketing point-of-destination businesses as anchors in each station area
- Ensuring a mix of businesses in each station area that can meet the daily retail and service needs of residents within a half-mile radius of the LRT station
- Contributing to the development of green infrastructure and walkable streets leading directly to commercial districts, within each half-mile station area
- Capturing a larger customer base from middle-distance community areas through the measures proposed to attract customers from the entire transit shed and secure the loyalty of customers in the immediate community
- Advocating for the attraction of new major employers to the Corridor