

# **SOUTH NASHVILLE INDUSTRIAL STUDY**

*Wedgewood-Houston and Chestnut Hill*

## **PART A: EXISTING CONDITIONS & MARKET ANALYSIS**



Final Report: November 26, 2019  
Prepared for the Metro Nashville Department of Planning  
By Randall Gross / Development Economics  
*With Wilmot, Inc.*

## **INTRODUCTION**

As development pressures continue to build around Nashville's urban core, there is a question of how or whether to adjust zoning and land use policy to reflect emerging market conditions. Nowhere is the dramatic change in land use more evident than in some of Nashville's older industrial areas, especially those located just north and south of downtown. Wedgewood-Houston and Chestnut Hill are residential and industrial neighborhoods in South Nashville under significant pressure for change, in terms of zoning and land use, density, price structure, and demographics. Metro Government is looking for technical input to help guide zoning, land use and economic development policy in these older industrial areas.

This report represents **Part A** of a two-part Industrial Study for South Nashville, focused on the two aforementioned neighborhoods. Section 1 of this Part A report provides a Site Analysis with input on existing physical and environmental conditions, yielding context for the changes currently underway. Section 2 provides broader economic context through an Economic Base Assessment, explaining local and regional trends in the economic base and in the industrial sectors, in particular. Section 3 summarizes existing real estate market conditions, and the positioning of South Nashville in the broader Nashville Area Industrial Market. Finally, Section 4 of this report provides findings from an Industrial Market Analysis for South Nashville, forecasting the development potential for industrial space based in part on the demand for specific types of industrial use for which these two neighborhoods are most competitive.

The separate Part B Report provides Strategic Recommendations for development and economic development in the study area, and translates these strategies into zoning and land use concepts for further review. Moving forward, the recommendations contained in this two-part report provide a basis for developing county-wide policies addressing "gentrification" in the city's older industrial zones. But in reality, there are significant differences between the city's various industrial areas in terms of market conditions, development potential, and the role of each industrial area in maintaining and growing Metro Nashville's overall economic competitiveness.

### **Acknowledgements**

The consultant wishes to acknowledge the assistance of the Metro Nashville Department of Planning in providing helpful information as input to this study. Critical input was also collected from other Metro departments, the Mayor's Office, and the private sector through business interviews and online surveys. Wilmot, Inc. served as sub-consultants on this study, providing input on zoning and environmental conditions.

## **Section 1. SITE ANALYSIS**

A Site Analysis was conducted to assess the location and general physical conditions of the study area, including factors impacting on the area's overall competitiveness for industrial and related uses. The site analysis was conducted based on extensive field reconnaissance, development of a building-by-building inventory of economic uses, interviews with business operators and property owners, input from an environmental conditions assessment, and a review of existing zoning and land use. Key factors considered include location, historical & change context, truck/rail and automobile access, exposure, existing industrial base and uses, surrounding uses, environmental conditions (including brown fields), zoning and land use policies, and other factors.

### **Location**

The study area is located adjacent to Downtown Nashville and is generally bounded by Lafayette Street (Murfreesboro Pike or U.S. 70S) on the northeast, Interstate 40 on the northwest, Brown's Creek and Creek Street on the east, Interstate 65 on the west and Wedgewood Avenue on the south. Fort Negley, which forms the northwest corner within these boundaries, is excluded from consideration as part of the study area. This area largely conforms to the definition of the Wedgewood-Houston and Chestnut Hill neighborhoods of historic south Nashville. (INSERT STUDY AREA MAP (Metro Planning))

### **Historical and Change Context**

South Nashville is among the oldest portions of the city, being located within a short 10- or 15-minute walk of the city's founding site at Fort Nashborough on the Cumberland River. The area served as a collection of early residential suburbs adjacent to the City Cemetery, opened on 4<sup>th</sup> Avenue South in 1822, just 16 years after the City of Nashville was incorporated. The cemetery remains today in the study area as an important site listed on the National Register of Historic Places. Among those buried in the cemetery are Nashville founder James Robertson along with Captain William Driver (who famously nicknamed the U.S. flag "Old Glory"), various local and state politicians, Confederate generals, and slaves of former President James K. Polk.

Historic Fort Negley, surrounded on two sides by the study area, served as one of the fortifications built to protect the Union-occupied city during the Civil War. The Union Army used the labor of hundreds of ex-slaves and black freedmen to build the fort, many of whom gave their lives during its construction and are likely buried on site. The re-constructed fortifications (restored by the Works Progress Administration) today serve as an historical park with a new visitor's center. The northern part of the site was converted to use as the city's

science museum (now Adventure Science Center) while the southern portion was converted in the 1970s into Herschel Greer Stadium, home to the Nashville Sounds Baseball team. Since the Sounds' relocation to First Tennessee Park in Germantown, Greer Stadium has been abandoned and is now being demolished to make way for a new city park.

The Victorian-era Chestnut Hill neighborhood is experiencing rapid physical and demographic change, as small, affordable cottages are replaced by townhome, condominium, and single-family housing priced in the \$600,000 range and higher. Long-time residents, many of whom are African-American, are relocating or being displaced out of the area, while transplanted young professionals (mostly white) are taking their place. The area has a number of historic residential properties as well as remnants of the community's commercial district along Chestnut Street. Layman Drug Store is among the remaining historic commercial buildings in the district and has been recently restored and converted into a cinematographic recording studio. The neighborhood is not a designated historic district protected through a zoning overlay, so historic homes are routinely demolished for newer development. Among the remaining houses of particular relevance in the neighborhood is 8,576 square-foot Victorian home of former Nashville Mayor Morton Howell, located at 1203 2<sup>nd</sup> Avenue, South. The Hubbard House, the home of former Meharry Medical College President Dr. George Hubbard, is located at 1109 1<sup>st</sup> Avenue South and is also listed on the National Register.

The area now known as Wedgewood-Houston (or WeHo) actually comprises a collage of several neighborhoods located north of Wedgewood Avenue west of 4<sup>th</sup> Avenue South. Some of the neighborhoods had been formerly organized as SNAP (South Nashville Action People) to assist local residents. A substantial portion of this neighborhood retains a single-family residential character but a part of the area transformed with the construction of major rail corridors and spurs into a busy industrial district in the 1910s.

During the early 2000s, a number of artists, small-batch "makers" and other "creatives" were drawn to WeHo by the availability of affordable industrial space. Art galleries and regular art walks and events followed the artisans to the area, adding to the neighborhood's "vibe" as a creative hub. As if often the case, the very artisans who helped draw attention to the neighborhood's potential are the ones who are gradually sidelined as private investors and real estate developers acquire properties and displace them.

Among the older and more historic industrial sites in this area, May Hosiery Mill is located at Chestnut and Martin streets. The mill once served as one of Nashville's largest employers, producing millions of socks and hosiery products at affordable prices for farmers and laborers nationwide. The mill famously produced the socks worn by Astronauts on the Apollo 11 mission to the Moon. Long after the mill closed in 1983, artists and craft makers moved into

abandoned spaces in the various buildings and helped spur the revitalization of Wedgewood-Houston. The mill is now under rehabilitation and redevelopment as a much higher-rent office, retail and hotel complex. Among the anchor tenants will be the offices for Apple Music. The developers of May Hosiery Mill worked closely with artists to allow them sufficient time to relocate, but the mill is now void of the artists who helped give WeHo its reputation as a creative hub. With redevelopment of the mill buildings, the artists and makers that once populated the site have been displaced to other areas in and outside of the neighborhood.

Other historic industrial buildings have also been restored in the neighborhood and several other vintage buildings have been converted to new uses like coffee shops and trendy office space. At least one historic mill building (a tall structure used for Purina Feeds) was demolished long ago and others are slated for demolition unless a marketable use can be found. Meanwhile, new urban, mixed-use projects like The Finery, aimed at attracting young professionals, are being developed in the heart of the WeHo community, as discussed later in this section. These projects are signals of “gentrification” that is forever changing the physical environment, the demographic mix, and the pricing structures for housing and business space in the WeHo community.

### **Access & Visibility**

The study area is located proximate to Downtown Nashville, just across the I-40 Interstate loop and expanding outward. Access to downtown is easy by car but walk-ability has been hindered by the presence of various highway bridges and a lack of safe and attractive sidewalk networks. Still, using sidewalks along the main corridors (Lafayette Street or 4<sup>th</sup> Avenue, South), pedestrian access is fairly easy to downtown. The area also offered walk-able access to affordable housing in and near the study area, but the rapid escalation in property values throughout the area has reduced that access.

The study area also has excellent local and regional highway access. The Interstate 40 inner loop provides access to all six legs of Nashville’s interstate highway system (I-40E/W, I-24E/W, and I-65N/S) and by extension to other highways including I-440, Ellington Parkway, Briley Parkway, and others. While located along the inner loop, access to the highway has been described as “tortuous,” since egress is only allowed at 4<sup>th</sup> Avenue South and ingress only allowed along an access road from Lafayette Street. Signage is confusing and traffic travels at breakneck speed through the area. Nevertheless, the highways provide critical access to industrial truck traffic for distribution throughout the region and beyond. Because of this central location and multi-highway access, the area has retained its competitiveness for certain types of industrial activity as discussed later in this report. Further, I-40 provides enormous exposure for commercial businesses, with average daily traffic counts (AADT) of 123,700 (TDOT, 2017) at this location.

Three major arterial corridors also cross through the study area, namely 4<sup>th</sup> Avenue South (Nolensville Pike), Lafayette Street (Murfreesboro Pike) and Wedgewood Avenue. Lafayette Street carries even more traffic than the interstate at this location, with AADT of 153,345 (TDOT, 2017) along its six lanes. Lafayette / Murfreesboro Pike extends south into the largest industrial corridor of the region, through heavily-populated southeast Davidson County and into growing Rutherford County and the urban centers of Lavergne, Smyrna and Murfreesboro. Rutherford County has a population fast approaching 350,000, or about the same as that of Davidson County 60 years ago. Murfreesboro Pike has access to both the Route 15 bus and Murfreesboro Pike BRT Lite (Route 55) routes. The Nashville/Murfreesboro Express Bus (Route 96X) also stops near the study area at the Greyhound Station on Lafayette Street.

The 4<sup>th</sup> Avenue / Nolensville Pike corridor extends south past Fairgrounds Nashville (soon to be home to the new MLS stadium) into the city's international district towards the growing town of Nolensville. While this one-way couplet carries surprisingly little traffic (8,106 vehicles southbound on 4<sup>th</sup> Avenue South and 8,842 northbound on 2<sup>nd</sup> Avenue, South, TDOT 2017), traffic more than doubles to 19,194 at the meeting of the couplet and grows to more than 30,000 near the Nashville Zoo and 40,000 near Providence. The Nolensville Pike BRT Lite Bus (Route 52) stops at the Fairgrounds, just south of the study area.

Wedgewood Avenue is an east-west cross-town arterial, unique and critically important in a city built on an extensive hub-and-spoke transportation system. This street carries 13,640 AADT (TDOT, 2017) near the Fairgrounds but carries nearly 40,000 vehicles on the west side of I-65. With the redevelopment of the Fairgrounds and expansion of its uses and destination attendance drivers, traffic along Wedgewood, Nolensville, and other area corridors is likely to increase especially at peak travel times and on match days.

In addition to road access, the study area has long been competitive for rail-using industrial uses because of its access to major CSX rail corridors and spurs that extend southeast and southwest from the area. A rail storage yard (with capacity for at least ten trains) located at the nexus of these lines is situated just north of Chestnut Street, sandwiched between the City Cemetery and the former Greer Stadium site.

## **Surrounding Areas**

The study area is ideally located in the center of a growing city and is practically surrounded by a variety of institutions, iconic sites and urban development projects. Some of these activities are discussed below.

### **SoBro**

As noted above, the study area is only steps away from an expanding Downtown Nashville, providing nearby access to many urban amenities and regional arterials. SoBro, the rapidly-changing downtown district closest to the study area, is probably seeing the bulk of major new hotel, office, and residential development in the downtown area. Music City Center has clearly accelerated new hotel and associated development south into SoBro. But new apartment and commercial development is also moving east from The Gulch along the newly-established Division Street Corridor. Lafayette Street forms the future nexus of where these two development patterns will meet and could become an important commercial/mixed-use destination in its own right.

### **Sudekum-Napier**

The MDHA Sudekum-Napier public housing complex is master planned for mixed-income, mixed-use redevelopment just northeast across Lafayette Street from the study area. The low-income housing is currently perceived to be associated with a high-crime area that has had a negative impact on industrial and commercial businesses within the study area, according to the businesses themselves. Redevelopment of Sudekum-Napier could offer opportunities for affordable and mixed-income housing while significantly changing perceptions and improving the investment climate along Lafayette Street.

### **MLS & Fairgrounds Nashville**

As noted previously, the Fairgrounds Nashville is located just south of the study area along Nolensville Pike. A new major league soccer (MLS) stadium is under construction, and associated mixed-use development is also planned at the site. Aside from that major development, NASCAR has expressed an interest in returning to the Nashville Speedway at the Fairgrounds; and the State Fair itself has stated that it will remain at the Fairgrounds at least for the near term. All of these developments and audience support-related activities could make the Fairgrounds a major visitor and local audience destination. These activities will spin-off demand for lodging, retail, and other economic activity in the area.

### **Trevecca Nazarene University**

The Trevecca campus is located just south-east of the study area. The university has been expanding, with enrollment currently at 3,620, according to *U.S. News and World Report*, including both graduate and undergraduate students. Enrollment growth has spurred new construction of on-campus and off-campus housing in the area.

## **Fort Negley**

As noted previously, Fort Negley has an important role in interpreting Civil War history and especially, the lives of African Americans and their role in constructing such fortifications. At present, the site offers the reconstructed fortifications and the Adventure Science Center, with the baseball stadium being demolished. Plans have not been finalized for the park and open space that will help memorialize those who gave their lives building the fort, but there is a desire to create an attractive green and open space in perpetuity. There has also been discussion about relocating and building a new science museum, but no specific plans have been drawn to that effect.

## **Southeast Industrial Corridor**

The industrial uses along Browns Creek within the study area form part of a larger industrial zone that extends east (Fesslers Lane, Foster Avenue, etc) and north (Intermodal Cartage, Hermitage Avenue) to the Cumberland River. These industrial areas form part of the even larger Southeast Industrial Corridor that extends along I-24 and Murfreesboro Pike for 30 miles into Lavergne, Smyrna, and Murfreesboro. Several of the largest industrial investments in the United States are located within this corridor, not the least of which is the 6.0 million square-foot Nissan Vehicle Assembly and Battery Plant in Smyrna. According to Nissan, the plant employs more than 8,000 workers and has the highest capacity of any automotive plant in North America.

## **Zoning & Land Use Policy**

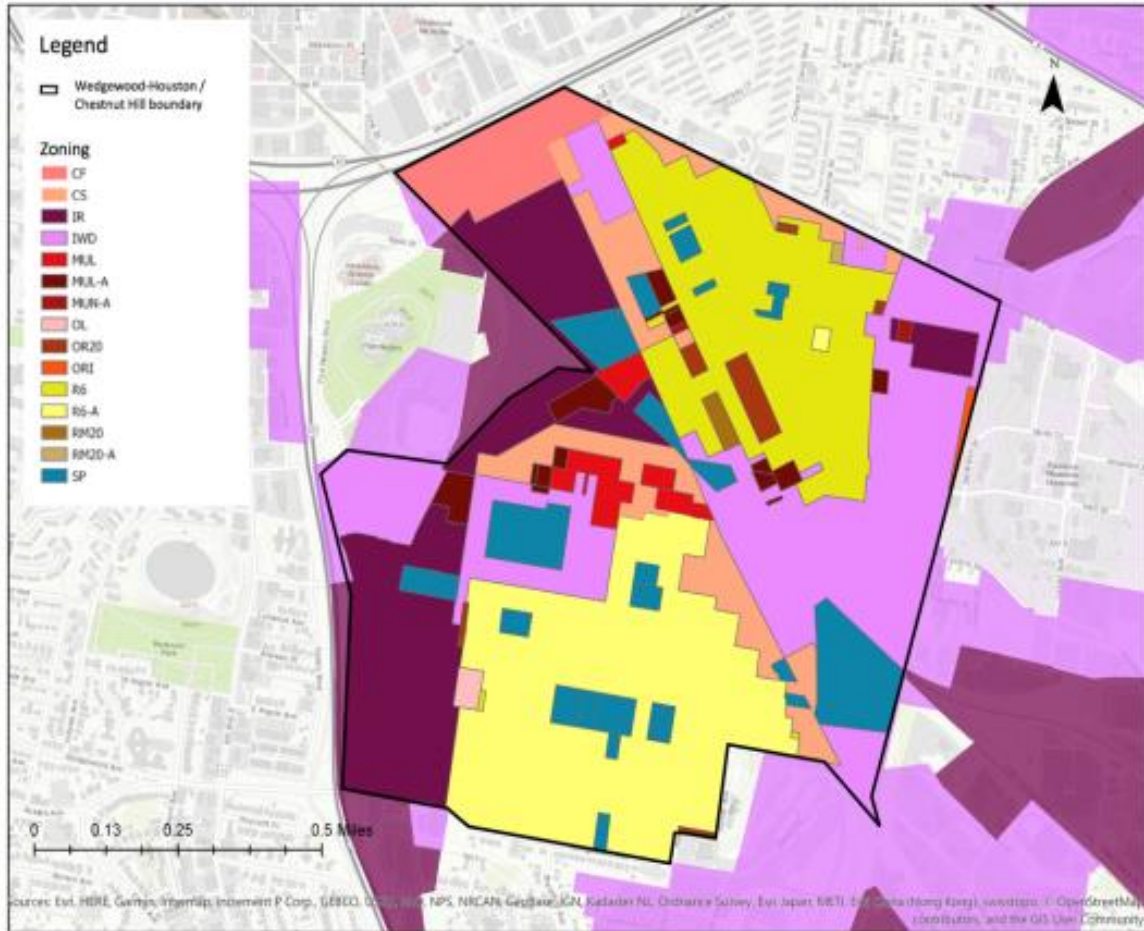
The study area has a total of 616 acres of land, based in GIS analysis by Wilmot, Inc. Of that amount, 374 acres are “developable” (apart from parks, cemeteries, public streets and rights-of-way, etc). Of that number, 104 acres are zoned for industrial use, including 53 acres zoned IR and 51 acres zoned IWD. Another 23 acres is zoned CS for commercial use. About 15.6 acres are vacant and undeveloped. Schools occupy 8.3 acres and designated parking areas comprise 6.8 acres.

Map 1, showing Study Area Zoning policy, is illustrated on the following page. As shown here, industrial zoning (lavender) covers nearly the eastern third of the study area (mainly in Chestnut Hill) and adjoining areas to the east, north, and south. Industrial zoning is also concentrated in portions of the center and western edge of Wedgewood Houston. However, a large SP has been formed in the middle of the central industrial area in WeHo and another large SP was carved out of the industrial zone in the southeast corner of the study area. Two large blocks of residential zoning comprise the neighborhoods of Chestnut Hill and WeHo, respectively. A Core Frame (CF) zone is spatially linked with the downtown area along I-40. Commercial zones have been created along the



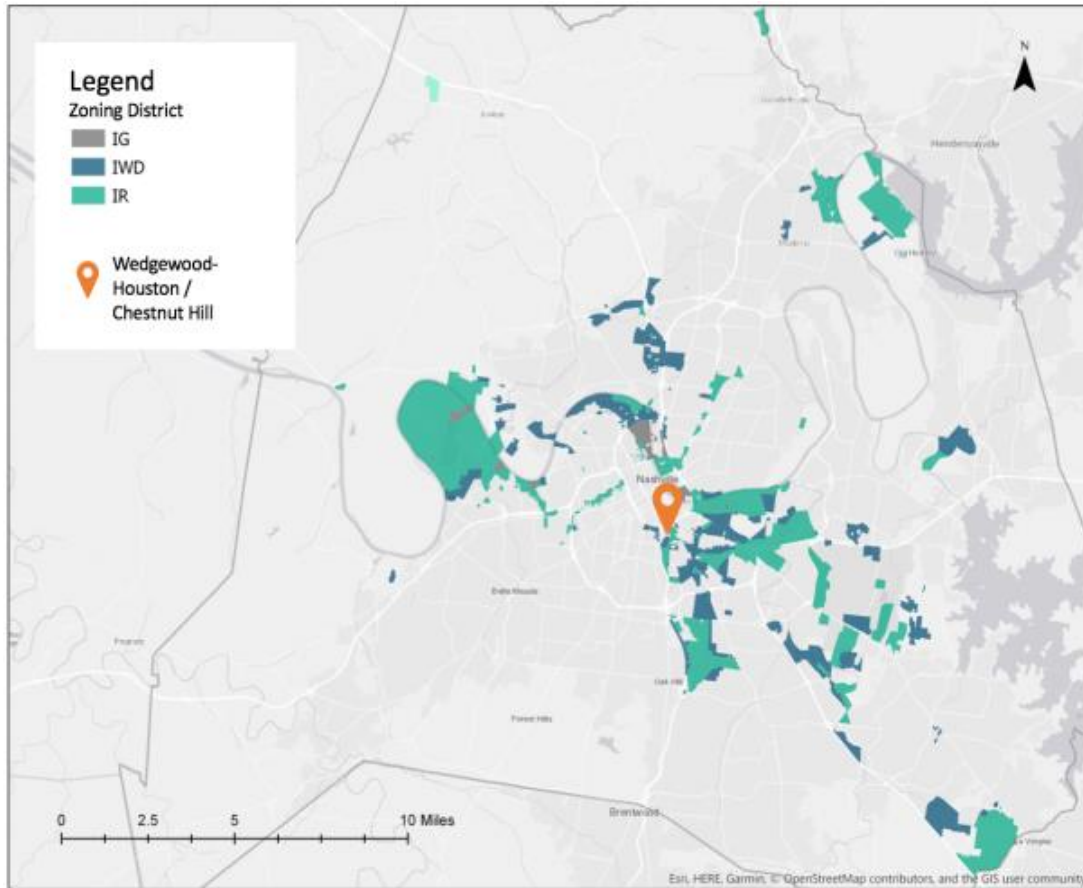
Lafayette Street Corridor, in the 4<sup>th</sup> Avenue business district near Chestnut Street, and along rail lines in WeHo.

Map 1. Study Area Zoning



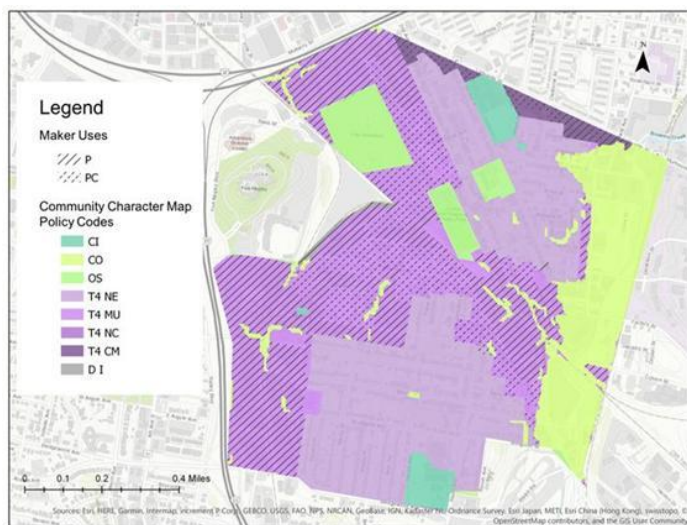
Map 2 (below) provides a Context Map of Industrial Zoning Districts in Davidson County. The study area is shown in the broader county-wide context of industrial zoning. The map clearly highlights the swath of industrial (IG, IWD, IR) zoning along the Cumberland River and throughout the southeast part of the county. Outside of the Southeast Corridor, the largest industrial areas are Cockrill Bend and Old Hickory, both of which are located on the river. Industrial zoning is practically absent from much of south-west portions of Nashville, as well as Donelson/Hermitage, and the northern half of the county, aside from Skyline (near the intersection of I-65N, I-24W, and Briley Parkway) and areas straddling the Cumberland River.

Map 2. Contextual Map for Industrial Zoning Districts, Davidson County



The NashvilleNext plan established character areas, with much of the eastern flank of the study area designated for conservation. Much of the rest of the study area is generally characterized as T4-Urban Neighborhood Evolving, T4-Urban Neighborhood Center, or T4-Mixed Use.

Map 3. Character Areas & Permitted Maker Areas



Within this context, small batch industrial (maker) uses are permitted by right on 125 acres and permitted with conditions on 97 acres in the study area. Such uses are not currently allowed on 152 acres of the developable land. A more detailed assessment of existing zoning by Wilmot, Inc. is found in the Appendix.

## **Existing Study Area Building Use**

The study area comprises a true “mixed-use” (but not fully integrated-use) collection of urban neighborhoods with an incredible diversity of industrial, housing, office, hotel, retail/commercial, institutional, open space, historic sites and other uses represented. Industrial uses include light, heavy and maker (small batch production) industries, warehousing / supply & distribution, industrial services and support, as well as storage uses. Housing uses include rental apartments and units in houses, large and small single-family homes, and diverse housing stock both historic and new. There are purpose-built office buildings as well as houses and retail buildings converted for office uses. There are new hotels under development.

Among the commercial uses are retail stores, restaurants, event spaces, art galleries, recording studios, and others. Institutional uses include churches and mosques, schools, and government buildings. Dudley Park and Fort Negley Park form some of the programmed open space available to residents in the community and beyond. Cemeteries, recreation and health clubs, television broadcast studios, and visitor attractions including historic homes and a science museum (not to mention the Fairgrounds and its new soccer stadium) are located in or adjacent to the study area.

### **Three Distinct Industrial Sub-Areas**

Industrial use within the study area is clustered into three main “sub-areas.” These include the aforementioned Browns Creek, Chestnut Hill, and WeHo sub-areas. These sub-areas are characterized by their physical attributes below.

- **Browns Creek Sub-Area.** Industrial uses along Brown’s Creek and Lewis Street have been impacted by flooding, especially during the historic 2010 floods that wreaked havoc across middle Tennessee. The area has several scattered industrial uses and, as noted above, forms part of a much larger adjoining industrial corridor to the north and east. There is no distinctive economic character, since the businesses cater to different markets, but several report being negatively impacted by crime and safety issues associated with nearby Sudekum-Napier. In fact, the consultant was approached by both drug dealers and prostitutes, activities which are practiced openly in this area, while conducting field reconnaissance for this study.
- **Chestnut Hill Sub-Area.** The Chestnut Hill industrial district is fairly compact and easily defined to include the supply-oriented businesses which located here mostly in the 1960s along the grid of streets bounded by Chestnut Street, 3<sup>rd</sup> Avenue South, I-40, and 4<sup>th</sup> Avenue South. The

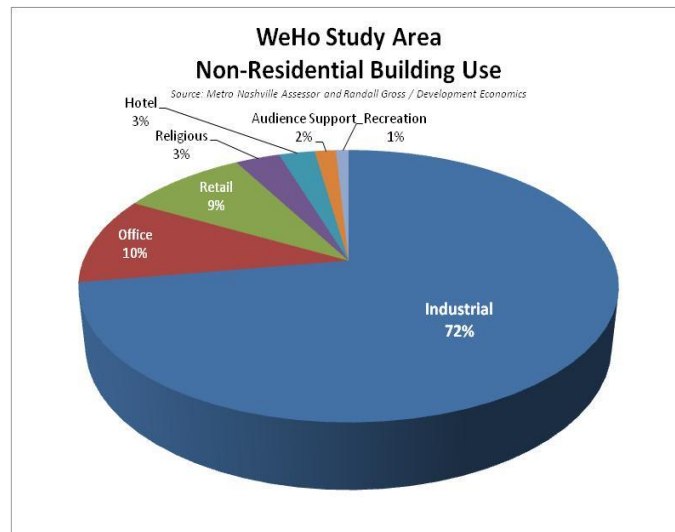
grid pattern of streets supports the small-scale uses that are located there, but tight blocks prevent large-scale expansion or truck traffic. Residential gentrification is occurring nearby throughout Chestnut Hill, but the industrial area is fairly self-contained.

- **WeHo Sub-Area.** The Wedgewood-Houston area, as noted before, is characterized more by historic mill buildings, rail-related uses and the ebb and flow of an artisanal maker community. Several art galleries, breweries and other businesses are building on the artisanal marketing theme to strengthen the area's draw as a destination for young professionals. Areas near Chestnut, Humphreys, Martin, and Merritt streets have seen the greatest development pressures and rapid change, with the center of this area evolving into a higher-density, mixed-use district. Residential neighborhoods to the south are also seeing rapid change, with densification and replacement of the working class housing stock that characterized the area until fairly recently.

## Inventory

A more detailed inventory was conducted of buildings and land within the study area, with a focus on non-residential uses. That inventory was conducted based on field reconnaissance and interviews, and research using assessment records for each property. Based on that research, it was determined that the study area includes approximately **2.2 million square feet** of industrial building space, representing **72%** of all non-residential building space in the study area. Thus, **industrial is still the predominant use**, in terms of building space.

Chart 1



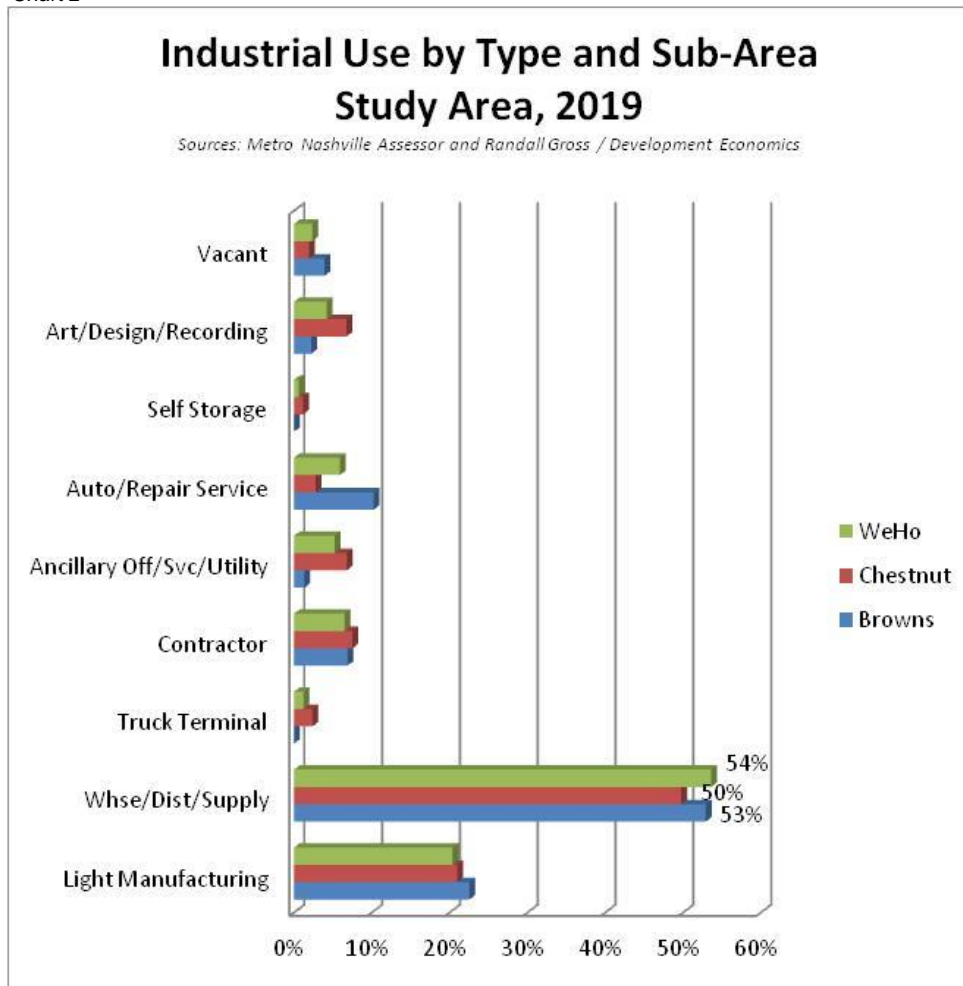
The study area also has 316,000 square feet of office space (10%), 270,000 square feet of retail/commercial space (9%), and 251,000 square feet of other non-residential uses (institutional, hotel, audience support, recreation). A detailed summary of the inventory is provided below.

<b>Table 1. EXISTING NON-RESIDENTIAL BUILDING USE, WEHO STUDY AREA, 2019</b>				
<b>Building Use</b>	<b>Brown's</b>	<b>Chestnut</b>	<b>WeHo</b>	<b>TOTAL</b>
<b>Industrial</b>				
Light Manufacturing	42,124	170,713	233,835	446,672
Whse/Dist/Supply	218,683	401,148	554,898	1,174,729
Truck Terminal	-	-	26,486	26,486
Contractor	6,854	52,090	83,434	142,378
Ancillary Off/Svc/Utility	29,145	10,135	75,513	114,793
Auto/Repair Service	20,959	77,473	30,953	129,384
Self Storage	-	-	13,040	13,040
Art/Design/Recording	-	16,770	75,380	92,150
Vacant	-	29,717	21,633	51,350
Sub-Total	317,764	758,046	1,115,172	2,190,982
<b>Office</b>				
Non-Profit	1,872	-	8,584	10,456
Prof/Tech Services	-	2,700	47,217	49,917
Publishing/Broadcasting	-	2,700	74,944	77,644
Health/Medical	-	-	1,754	1,754
Business Services	-	-	25,048	25,048
RE Development	-	-	8,179	8,179
Other Services	-	-	23,365	23,365
Vacant	-	16,503	102,896	119,399
Sub-Total	1,872	21,903	291,986	315,761
<b>Retail</b>				
Convenience	43,952	2,788	1,320	48,060
Shoppers Goods	15,701	25,869	63,506	105,076
Eating & Drinking	3,267	3,310	28,364	34,941
Entertainment	-	15,760	1,066	16,826
Personal Services	821	2,700	6,777	10,298
Vacant	14,901	-	40,001	54,902
Sub-Total	78,643	50,427	141,034	270,103
<b>Other</b>				
Recreation	-	24,129	3,270	27,399
Hotel	-	-	77,999	77,999
Audience Support	-	-	-	-
Performance Venue	-	-	3,270	3,270
Art Gallery	-	1,710	10,359	12,069
Event Space	5,000	-	25,779	30,779
Institutional	-	-	-	-
Religious	31,873	30,650	33,631	96,154
Private School	-	3,000	8	3,008
Sub-Total	36,873	59,489	154,316	250,678
<b>TOTAL</b>	<b>435,152</b>	<b>889,864</b>	<b>1,702,508</b>	<b>3,027,524</b>
<b>Industrial</b>	<b>73.0%</b>	<b>85.2%</b>	<b>65.5%</b>	<b>72.4%</b>
<b>Office</b>	<b>0.4%</b>	<b>2.5%</b>	<b>17.2%</b>	<b>10.4%</b>
<b>Retail</b>	<b>18.1%</b>	<b>5.7%</b>	<b>8.3%</b>	<b>8.9%</b>
<b>Other</b>	<b>8.5%</b>	<b>6.7%</b>	<b>9.1%</b>	<b>8.3%</b>
Sources:	Metro Nashville Assessor, Businesses, and Randall Gross / Development Economics.			

**Industrial Use by Type and Sub-Area.** Each of the uses was disaggregated by sub-area as defined previously in this report. About 54% of study area industrial activity is oriented to warehousing, distribution, or supply. However, the second most-prominent industrial use is light manufacturing, which

accounts for over 20% of the industrial space in the study area and remains an important driver of economic activity.

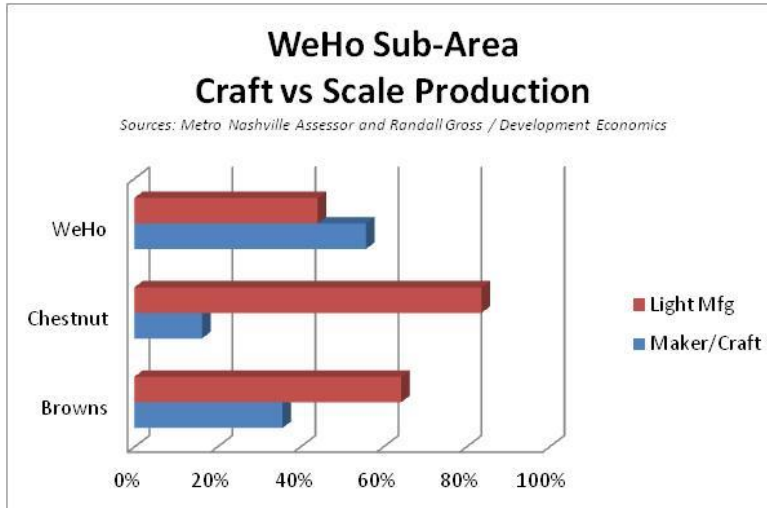
Chart 2



Warehousing and distribution uses are slightly more prominent in Wedgewood-Houston and Browns Creek than in the Chestnut Industrial area. Light manufacturing forms a slightly larger share of industrial use in Browns Creek than in the other areas, but in general, the three areas have a surprisingly similar mix of industrial uses. Where there are differences, they tend to be in industrial services like auto repair, which has a higher concentration in Brown's Creek (mainly along Lafayette Street) than in the other areas; or in artisanal, design, and recording uses, which are more concentrated in WeHo than in the other areas. But despite WeHo's reputation as a hub for artists and designers, those uses only represent about 6.8% of industrial-related use (and ranked 5<sup>th</sup> among industrial uses after warehousing, light manufacturing, contractors, and ancillary industrial/office services) in that sub-area.

**Craft versus Full-Scaled Production.** A more detailed assessment was conducted of existing craft (“maker”) versus full-scaled light industrial production within the study area. This analysis determined that traditional light manufacturing dominates over small-batch (maker) production in both the Chestnut and Browns Creek industrial sub-areas. But within WeHo, craft makers do outnumber (and occupy more space) than other light industrial businesses.

Chart 3



### **Industrial Clusters**

The study area has several economic clusters, or concentrations of industrial uses, based on the number and square footage of these uses. Having a cluster of such activities indicates that the area may have been (and perhaps continues to be) competitive for these uses due to location, accessibility, supply chain, market base, or other reasons. Clusters also indicate an ongoing strength for attracting similar industries or those that supply them or use their products in their own respective industries. Among the existing clusters are the following

- **Construction**
- **Transportation**
- **Media/Information Services**
- **Art & Design**
- **Machinery, Tools & Equipment**
- **Food & Beverage**
- **Wood / Furniture**

There are also several industries that, while not represented by a large number or cluster of businesses, are nevertheless present and prominent in the study area. These include medical supplies, waste & recycling services, and

## Randall Gross / Development Economics

general wholesale trade businesses. More detailed information on the clusters and their component industries is provided below.

<b>Table 2. INDUSTRIAL CLUSTERS, STUDY AREA, 2019</b>			
<b>Industry Cluster</b>	<b>Number</b>	<b>Sq. Ft.</b>	<b>Industries</b>
<b>Construction</b>	<b>45</b>	<b>770,796</b>	
Building Supplies	13	305,084	Plumbing, Doors & Windows, Bolts
Construction Services	15	112,877	Contractors, Construction Mgt
Lighting/Electrical	8	130,257	Lighting Equipment Supply, Design
Non-Metallic Minerals	5	129,653	Granite, Stone
Paint	1	81,935	Paints and Coloring
Signs, Decals, etc	3	10,990	Signage, Wall Decals, etc.
<b>Transportation</b>	<b>30</b>	<b>213,577</b>	
Trucking	5	44,533	Trucking Services, Terminals
Automotive	25	169,044	Part Suppliers, Repair Services
<b>Information</b>	<b>26</b>	<b>392,312</b>	
Printing & Publishing	14	251,497	Silk Screen, Publishing, Printing, Stamps
Recording & Broadcasting	10	134,275	Recording Studios, Pressing, Broadcasting
Information Services	2	6,540	Data Processing, Web Services
<b>Art &amp; Design</b>	<b>19</b>	<b>72,327</b>	
Visual Artists, Designers	18	66,603	Artists, Jewelers, Architects, Photo, Costume
Musical Instruments	1	5,724	Musical Instruments
<b>Machinery, Tools &amp; Equip</b>	<b>13</b>	<b>323,448</b>	
Machinery & Equipment	10	311,185	Engines, Motors, Office Equip, Equip Svc
Tools	3	12,263	Tools, Tool & Die Shops
<b>Food &amp; Beverages</b>	<b>13</b>	<b>189,402</b>	
Beverages	7	87,418	Distilleries, Breweries, Distributors
Food	6	101,984	Bakeries, Chili, Catering, Distributors
<b>Wood &amp; Furniture</b>	<b>6</b>	<b>76,753</b>	
Wood Products	4	66,880	Lumber, Wood Refurbishment
Furniture	2	9,873	Furniture, Furnishings
Sources:	Metro Nashville Assessor, Businesses, and Randall Gross / Development Economics.		

**Construction.** As shown above, the construction cluster includes a total of 45 building suppliers, contractors, lighting & electrical companies, stone/granite suppliers, paint producers, and sign suppliers. Based on input from businesses in the cluster, construction businesses clustered in the area because of its central location and highway accessibility for serving the regional market. The location is also excellent for servicing downtown-area projects, of which

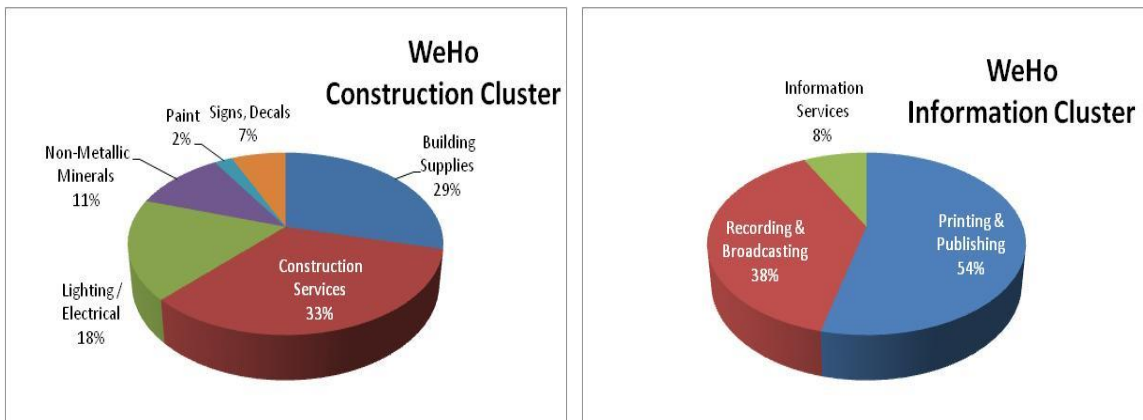


there are many during the current building boom. Finally, the area supports a number and diversity of suppliers critical to the construction sector.

**Transportation.** The 30 transportation companies are mainly engaged in trucking services, automotive supply or repair services. Trucking businesses have clustered here because of the exceptional highway accessibility, while service businesses gain exposure to the market base in a major traffic corridor.

**Media & Information Services.** A total 26 information-oriented businesses includes 14 printing & publishing companies, 10 recording and broadcasting businesses, and two others engaged in data processing or web-based services. These companies have clustered here and throughout central Nashville because of proximity to the music and media industries in Music Row. The location also offers access to downtown amenities and a “hip” factor for WeHo because of the perceived concentration of artists and makers. Certainly the most historic of these businesses is United Record Pressing (URP), which manufactures vinyl records and remains the largest of its kind in North America. The plant in WeHo also provided apartments for visiting Motown and other black artists that could not otherwise stay in motels during the segregation era. Tours of the original furnished apartments along with the unique process of manufacturing vinyl records for artists like Jack White, gave URP an exceptionally high “hip” factor. The company is doing so well that it expanded into new facilities but is planning to showcase the history at the old WeHo plant.

Charts 4 and 5



**Art & Design.** There are nearly 20 art and design-oriented businesses (not including individual artists who may work from home), such as visual artists and designers as well as a producer of musical instruments working from formal business spaces. Artists and makers clustered here originally because of the availability of affordable industrial spaces and collaborative environment that suited their work requirements. The clustering of artists allowed for more collaboration, which built a community on itself. WeHo gradually offered the “hip” factor, amenities, and easy access to downtown and urban neighborhoods. Since the community was centered on cheap space at the May Hosiery Mill (under

redevelopment) and maker space at Fort Houston (relocated out of WeHo), it is not clear that the artist “community” still exists to the extent it did a few years ago in Wedgewood-Houston before these spaces were purchased for redevelopment.

Whether or not WeHo still represents a large cluster of artists and makers, there is a growing collection of retailers, restaurants, coffee shops, beverage companies, art galleries, and other businesses in addition to artists and makers that are helping to define Wedgewood-Houston as a “hip” location. Some of these businesses are listed below for illustrative purposes.

- Falcon & Flamingo
- May Hosiery (but affordable artist space is gone)
- Bento Nashville
- Jackalope Brewery
- Corsair Distillery
- The Finery & Diskin Cidery
- Nashville Design Collective (planned)
- Chandler Brothers Pool Hall
- 9 Art Galleries & Shared Artist Spaces: Zeitgeist, et al
- 14 Hip Restaurants: Bastion, et al
- Fort Houston (just outside the study area)
- Fork’s Drum Closet
- United Record Pressing (relocated, but planning for old building)
- Infinity Cat Records
- Griffin Technology, etc

**Machinery, Tools & Equipment.** Another 13 businesses are engaged in producing machinery, tools & equipment including companies making motors, engines, and office equipment; as well as several tool & die shops. Many of the machinery and equipment businesses located in the area decades ago and now have “sunk” infrastructure that prevents them from pulling up roots and moving out. That being said, some of these businesses have been displaced due to rising property values in what was once an affordable business district.

**Food & Beverage.** The 13 food & beverage-related industrial businesses include distilleries, breweries, and distributors of beverages; as well as bakeries, a chili producer, catering companies, and food distributors. Of course this number does not include the growing number of restaurants, coffee shops and other F&B-related retail businesses. F&B producers and caterers located in the area initially and presently due to the central location and access to a regional market. Some food



truck and catering businesses also gain affordable space and good access here to their prime downtown and midtown markets. New distilleries, breweries, and cideries benefit from the central location for distribution but also from the cool factor of being located in WeHo near an emerging urban hub and young professional housing.

**Wood & Furniture.** Finally, the six wood & furniture companies produce, supply, or refurbish wood and make furniture and furnishings. These types of companies have long-operated in the area due to affordable rail access for lumber distribution. Today, the central location affords access to a different, more consumer-oriented market for refurbished wood and hand-made furniture products in a growing node and expanding market.

### **Residential Use**

The study area has a total of 1,115 residential units and an estimated population of 2,576, according to Claritas, Inc. based partly on Census data. That data suggests that there are 429 housing units in Chestnut Hill and 686 in the WeHo area. The data indicate that an overall average 54% of study area residents are African-American, but there is significant demographic difference between the two areas (79% of Chestnut Hill residents are black while only 39% are black in WeHo). Claritas, Inc. also estimates that median household incomes are one-third higher in WeHo (\$53,200) than in Chestnut Hill (\$39,600). It should be noted that the data may represent a serious lag due to demolition, new construction, rapid property turnover, and changing demographics (a.k.a., gentrification).

A sampling of 265 Chestnut Hill residential properties was conducted for this study based on field reconnaissance and assessment records. Of those units, 93 (35%) are single-family, 12 are condominiums, 65 are in 2-4 unit buildings, and 93 are in multi-family buildings. There are also two mobile homes located in Chestnut Hill. Based on a review of mailing addresses versus property addresses in assessment records, it was determined that 41% of Chestnut Hill single-family houses are owner-occupied (meaning that the owner mailing address and property address were the same). Only 14% of all residential properties in Chestnut Hill are owner-occupied, based on assessment records. These numbers are lower than the Claritas, Inc. data estimates of 29.3% owner-occupied (but may also represent a lag in data as noted above).

### **New Development**

There has been, and continues to be, significant new construction throughout the study area. A large number of projects are planned, proposed, or under construction, including the following:

- Bento Nashville (89 Micro Units, Retail, & Bar recently completed)
- 915/922 5<sup>th</sup> Avenue South (140 Condos, 9-stories)
- The Finery
  - 490 Residential Units (“Live/Make” condos, MF, Mixed)
  - 80,000 SF Commercial
    - Diskin Cidery (& Adjacent Expansion Properties)
- Alloy @ Tech Hill (82-Unit Condominium, Nearby)
- Nashville Design Collective
- Outpost Nashville (Up to 300 Residential Units, Retail, Work Space)
- Segment @ Pillow (34 Units, including 26 Flats & 8 Townhouses)
- May Hosiery Co-Op & 427 Chestnut Street
  - 114,000 SF Retail, Restaurant, Office/Work Space
- 1700 4<sup>th</sup> Avenue S (260-Unit Core Development)
- 630/640 Hamilton (37 Townhouse Red Seal Development)
- Never Never (413 Houston St Restaurant/Bar)
- Fairgrounds Nashville (Nearby)
  - MLS Stadium, Mixed-Use Development, New Fair Park Facilities
- Arena Imprints (25,000 SF Expansion)
- Various other projects, including small warehouses, Artisan spaces, single-family residential, churches, studios, retail/Commercial, Vietti Chili renovations, Martin Offices, catering, etc.

Altogether, there is an estimated 1,450 residential units planned or under development in or near the study area, which is about 300 more than currently exist. There are another 250,000 square feet of commercial and 25,000 square feet of industrial space planned or under construction. At Fairgrounds Nashville, a new 30,500 seat soccer stadium is under construction. Neighboring Fort Negley will be transformed into a major new park and heritage site.

## **Business Stakeholder Input**

Interviews and an online survey were conducted with businesses located in the study area. The companies represented a mix of smaller and larger firms, service-oriented businesses and producers, scaled industries and craft makers, new and long-established businesses, renters and owners. Some of the key findings from these businesses are summarized below.

### **Advantages of S. Nashville Location**

Businesses were fairly consistent in their detailing of competitive advantages for the study area as a location for industrial uses. Among these advantages are proximity to downtown, the central location and highway accessibility, the availability of industrial zoning, available parking, relative affordability; and various “soft” factors including having “good neighbors,” the

“cool” factor associated with the location, and the opportunities for co-branding with similar businesses.

### **Disadvantages of S. Nashville Location**

Probably the biggest challenge for many businesses (especially small businesses and craft makers) is the rapidly-escalating rent situation in the area, with some properties seeing rents doubling in just two to three years. This issue is not unique to the study area, by any means, and many small-batch businesses and artists that depended on use of low-rent mill space have already left the area. But the issue persists and continues to impact on the bottom line for many smaller businesses.

Crime and perceptions of safety are another serious issue, particularly in Chestnut Hill near the Sudekum-Napier public housing development. Even the perception of crime can seriously hinder employee recruitment, which is already challenging in a period of high employment.

There are also a number of physical challenges. Probably the most prominent of these is the regular at-grade freight train service through the area which, having been a competitive advantage in the past, now serves mainly to block traffic and irritate workers. And, while the area is close to downtown, workers complain about the lack of walk-ability and connectivity to downtown, which is sequestered from the south by the massive interstate highway loop. New commercial and mixed-use development is bringing higher traffic loads to the area which, coupled with the at-grade train crossings, reduces travel speeds in an area that rarely saw major traffic flow in the past.

Some of the business representatives complained about Nashville in general as a location, due to a myriad of quality of life concerns (schools being a high priority), traffic, and what some perceive as unbridled growth.

### **Suggestions Offered**

Business representatives were asked about their suggestions to address some of these issues. Some respondents suggested that distinct zones be created for different types of businesses or business mix, since not all industrial businesses have the same operating requirements. Others suggested the use of incentives to retain, grow and recruit industrial businesses. Such incentives do not necessarily require the use of fiscal mechanisms, with businesses suggesting improvements to the infrastructure as the most important tool for retaining and growing industrial businesses.

## **Environmental Assessment**

An assessment of existing environmental conditions was conducted by Wilmot, Inc. as input to this study. The assessment focused on Browns Creek and associated flooding issues, and researched the presence of brown field sites within the study area. Both of these issues could impact on the marketability and developability of land in the study area.

### **Browns Creek**

Browns Creek and adjoining land is situated within a 100-year flood plain that impacts on the developability of land in the area. The devastating floods of 2010 did cause damage to some businesses in the area, but there have been no Metro buy-outs of industrial businesses to date. Nor have there been any grant programs to assist industrial businesses in the area recoup expenses from flood damage or related costs.



There is a significant amount of illegal dumping along the creek (as shown above) that damages the environment and reduces the area's attractiveness for recreation users and businesses. However, a proposed greenway alongside the creek, if constructed, could help bring more attention and resources to cleaning and maintaining the undeveloped areas adjacent to the creek. Wilmot, Inc. has identified the typical causes of environmental damage that could be found in the area, as listed below.

<b>Cause</b>	<b>Source</b>
<b>Oil and grease</b>	Industrial point source discharge High urbanization
<b>Nitrate and Nitrite</b>	High urbanization
<b>Total Phosphorus</b>	Industrial point source discharge High urbanization
<b><i>Escherichia coli</i></b>	High urbanization MS4 discharge Sanitary sewer overflows
<b>Other anthropogenic habitat alterations</b>	High urbanization

### **Brown Fields**

The most recent inventory of brown fields conducted for this area was completed for the Environmental Protection Agency (EPA) in 2000-01. That report identified 16 existing brown fields, all but one of which were clustered within the same Browns Creek floodplain that saw damage from the 2010

flooding. The map at right shows a number of the sites clustered in the north-east corner of the study area along Browns Creek (and within the Conservation Character area).

There have been no apparent remediation efforts among these brown field sites. Nor has there been a need for remediation at redevelopment sites such as the May Hosiery Mill, according to the developers of such projects. Should remediation be required at the Browns Creek or other sites, some funding would be available through TDEC and the EPA for Assessment Grants.

*Map showing Brown Field Sites Identified by EPA (2001)*

Additional information on environmental conditions, flooding, and brown fields is found in the Wilmot, Inc. report in the Appendix of this document.



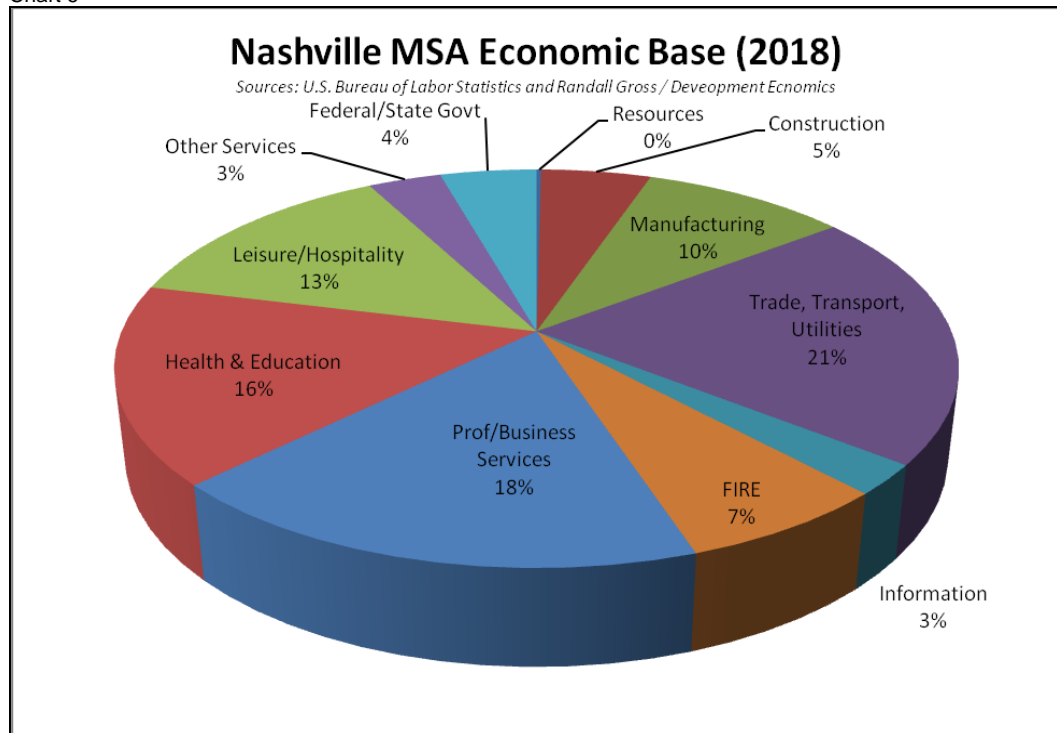
## Section 2. ECONOMIC BASE ASSESSMENT

An economic base assessment was conducted to provide context for determining industrial market demand and economic potentials within the study area. Employment trends and industry sectors are examined along with the specific trends in manufacturing, both regionally and within Nashville-Davidson County.

### Nashville Metropolitan Area Economic Base

The Nashville MSA has a relatively diverse economy, which has traditionally sheltered the area from dramatic economic cycles and dislocations. The Nashville area typically enters recessionary periods later than other parts of the country and emerges from them sooner.

Chart 6



The largest sectors in terms of employment include TTU (trade, transport and utilities, 21%), professional & business services (18%), health & education (16%), leisure & hospitality (13%), and manufacturing (10%). Most sectors are well-represented by businesses in the area except for resource-based industries like agriculture, mining and other extraction industries.



**Overall Employment Trends**

The Nashville MSA has had one of the fastest job growth rates of any major metropolitan area in the United States since 2010. The area gained about 223,020 jobs between 2010 and 2018, based on data collected by the U.S. Bureau of Labor Statistics (BLS), representing a growth rate of 29.0% or 3.6% per year. The Nashville MSA has exceeded 1.0 million workers for the first time and total employment stood at 1,032,000 in April, 2019. Examining a longer trend using data produced by the U.S. Bureau of the Census, shows that the Nashville area generated employment growth of 1.7% per year over the period from 2002 through 2015.

<b>Table 3. AT-PLACE EMPLOYMENT TRENDS, NASHVILLE MSA, 2002-2015</b>						
<b>Industry Sector</b>	<b>2002</b>	<b>2010</b>	<b>2015</b>	<b>2002-2015 Change</b>		
				<b>Number</b>	<b>Percent</b>	<b>Per Year</b>
Agriculture, Fishing	789	837	897	108	13.7%	1.1%
Mining, Quarrying	762	459	799	37	4.9%	0.4%
Utilities	3,404	3,233	3,550	146	4.3%	0.3%
Construction	32,811	30,960	36,963	4,152	12.7%	1.0%
Manufacturing	96,800	64,561	81,153	(15,647)	-16.2%	-1.2%
Wholesale Trade	37,778	37,967	41,854	4,076	10.8%	0.8%
Retail Trade	82,553	85,428	101,606	19,053	23.1%	1.8%
Transport & Warehousing	27,288	26,854	35,864	8,576	31.4%	2.4%
Information Services	21,501	19,747	21,375	(126)	-0.6%	0.0%
Finance & Insurance	34,691	37,078	42,591	7,900	22.8%	1.8%
Real Estate	11,784	12,300	14,981	3,197	27.1%	2.1%
Prof/Tech Services	34,331	36,245	56,766	22,435	65.3%	5.0%
Management Services	6,657	10,055	19,669	13,012	195.5%	15.0%
Administrative Services	54,589	49,832	69,205	14,616	26.8%	2.1%
Education	58,739	69,412	70,240	11,501	19.6%	1.5%
Health Care	79,937	114,019	127,460	47,523	59.5%	4.6%
Arts, Entertainment	7,891	10,153	12,875	4,984	63.2%	4.9%
Accommodation, FS	64,254	71,441	87,395	23,141	36.0%	2.8%
Other Services	22,590	22,498	26,215	3,625	16.0%	1.2%
Government	54,104	64,130	46,638	(7,466)	-13.8%	-1.1%
<b>TOTAL</b>	<b>733,253</b>	<b>767,209</b>	<b>898,096</b>	<b>164,843</b>	<b>22.5%</b>	<b>1.7%</b>
Sources:	U.S. Bureau of the Census and Randall Gross / Development Economics.					

Overall between 2002 and 2015, the region's employment increased in all private industry sectors with the exception of manufacturing, which lost 15,600 jobs and fell by an average of 1.2% per year. However, since 2010, manufacturing has rebounded in the region, with a gain of about 16,600 jobs from 2010 to 2015 (based on Census data) and another 5,700 jobs between 2015 and 2018 (based on BLS data), for a total of 22,300 jobs. While still not at its peak of nearly 97,000 manufacturing jobs around 2002, manufacturing is nevertheless on the rebound throughout the region. Part of the reason for this, and for a turnaround nationwide, is that capital debt is driving manufacturers to employ more "disposable" labor in the event that there is a downturn in the economy (in which case they can reduce employment).

**Fast-Growing Sectors.** The region has seen the fastest employment growth in management services (15.0% per year), which corresponds to Nashville's economic development success in attracting corporate headquarters and management service companies. The region's professional and technical service employment is also rising quickly (5.0% per year), again due to the growth in white-collar labor force and associated jobs. Nashville's strength as a hub for the cultural industries and entertainment has helped push employment in that sector up by 4.9% per year. Similarly, Nashville's role as a national hub for the health care industry, along with its own local health care institutions, has grown along with demand for health care services nationwide. Further, Nashville's rapid growth as a tourism destination has helped push employment in the accommodation and foodservice sector up by 2.8% per year. The region's competitive advantages as a logistics hub contributed to the 2.4% annual growth in transportation services. The region has also seen solid growth in administrative services, real estate and other sectors.

**Slow-Growing Sectors.** The region's growth has generally lagged behind in manufacturing, as noted above, along with mining (in the form of quarrying and extraction), utilities, wholesale trade, information services, and government. Information services, which includes the media and recording industries, has been impacted in particular due to the shift from print and other hard product purchasing to "soft" online media. Nashville was once a center for the printing and publishing industries, but while some local companies (e.g., Ingram Industries) have gradually adjusted through development of online content and digital services, other companies have had difficulty adjusting to rapidly-changing technologies. In the music industry, streaming agreements early on led to deficiencies in revenue necessary to support Nashville's writing and publishing infrastructure.

**Davidson County.** Employment trends within Davidson County generally mirror those of the region as a whole, since Nashville is the driver for the Middle Tennessee economy. In general, however, the rate of growth is much slower in Nashville, at 0.7% per year.

<b>Table 4. AT-PLACE EMPLOYMENT TRENDS, NASHVILLE-DAVIDSON</b>						
<b>2002-2015</b>						
<b>Industry Sector</b>	<b>2002</b>	<b>2010</b>	<b>2015</b>	<b>2002-2015 Change</b>		
				<b>Number</b>	<b>Percent</b>	<b>Per Year</b>
Agriculture, Fishing	253	246	278	25	9.9%	0.8%
Mining, Quarrying	229	175	167	(62)	-27.1%	-2.1%
Utilities	1,701	1,576	1,431	(270)	-15.9%	-1.2%
Construction	16,968	16,363	18,427	1,459	8.6%	0.7%
Manufacturing	38,023	20,630	20,515	(17,508)	-46.0%	-3.5%
Wholesale Trade	24,181	22,449	24,211	30	0.1%	0.0%
Retail Trade	45,870	41,574	47,641	1,771	3.9%	0.3%
Transport & Warehousing	18,675	17,205	22,010	3,335	17.9%	1.4%
Information Services	12,953	12,791	13,280	327	2.5%	0.2%
Finance & Insurance	19,508	20,374	22,244	2,736	14.0%	1.1%
Real Estate	7,832	7,355	9,397	1,565	20.0%	1.5%
Prof/Tech Services	22,333	21,013	35,403	13,070	58.5%	4.5%
Management Services	3,857	4,846	8,121	4,264	110.6%	8.5%
Administrative Services	38,334	30,287	41,317	2,983	7.8%	0.6%
Education	32,115	34,182	33,597	1,482	4.6%	0.4%
Health Care	51,572	68,252	75,306	23,734	46.0%	3.5%
Arts, Entertainment	5,221	6,389	8,299	3,078	59.0%	4.5%
Accommodation, FS	41,880	41,578	48,779	6,899	16.5%	1.3%
Other Services	14,728	13,681	16,107	1,379	9.4%	0.7%
Government	44,370	51,345	31,921	(12,449)	-28.1%	-2.2%
<b>TOTAL</b>	<b>440,603</b>	<b>432,311</b>	<b>478,451</b>	<b>37,848</b>	<b>8.6%</b>	<b>0.7%</b>
Sources:	U.S. Bureau of the Census and Randall Gross / Development Economics.					

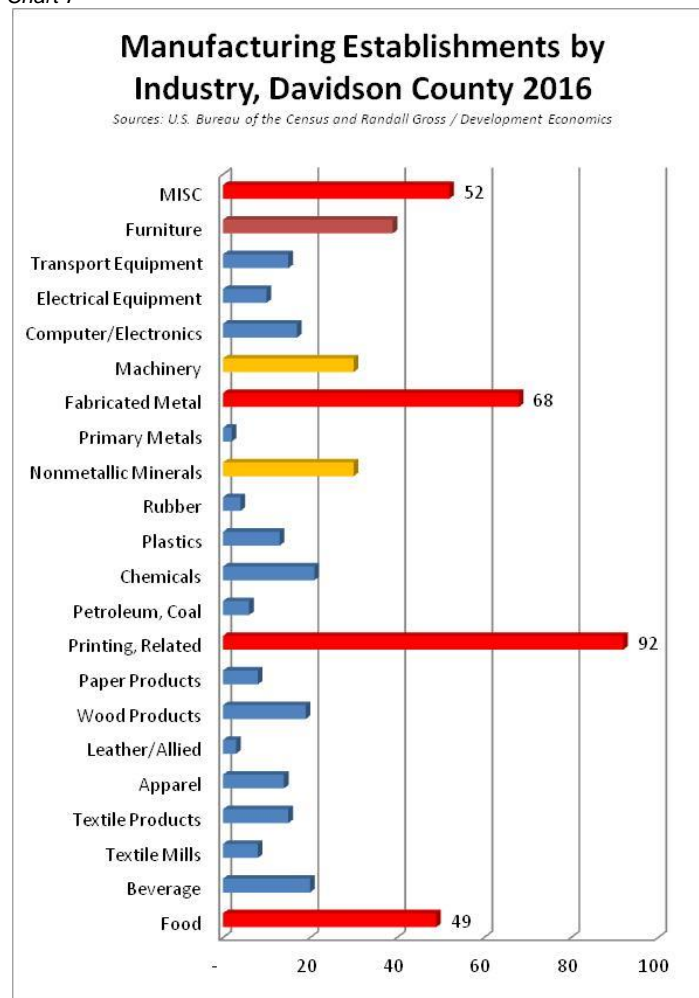
Davidson County’s employment growth has accelerated in the last three years, according to BLS data. Nashville’s total employment base has expanded by 3.1% per year (or 13,600 jobs per year) between 2015 and 2018. By far the largest numeric increase was in professional and technical services employment, with Nashville adding nearly 11,200 jobs in that sector in just three years. Accommodation & foodservice added nearly 10,000 jobs, health & education 6,000, construction 4,000 (yielding the fastest-growth, at 6.1%/year), and finance 3,500. Manufacturing expanded modestly, adding over 1,400 jobs or 2.4% per year since 2015. The only major sector losing employment in Nashville since 2015 was information services (which lost about 100 jobs over three years).

As in the region overall since 2002, Davidson County has seen rapid growth in management services, professional & technical services, arts & entertainment, and health care. And, similar to the MSA, Nashville has seen slower or no growth in manufacturing, quarrying, utilities, wholesale trade, information services, and government.

**Manufacturing**

Further analysis was conducted of Nashville’s manufacturing base, since it is an important driver for industrial employment and real estate. The Census of Manufacturing recorded 560 manufacturing establishments in Davidson County in 2016. That number is likely an undercount, and does not include most small “makers” or small-batch producers of which there are an estimated 200 to 250 in Davidson County alone based on information supplied by the Nashville Fashion Alliance, Fort Houston, and other local groups; and through field reconnaissance and research conducted on urban manufacturing in the city. This number also does not include individual artists, who are counted under Arts & Entertainment.

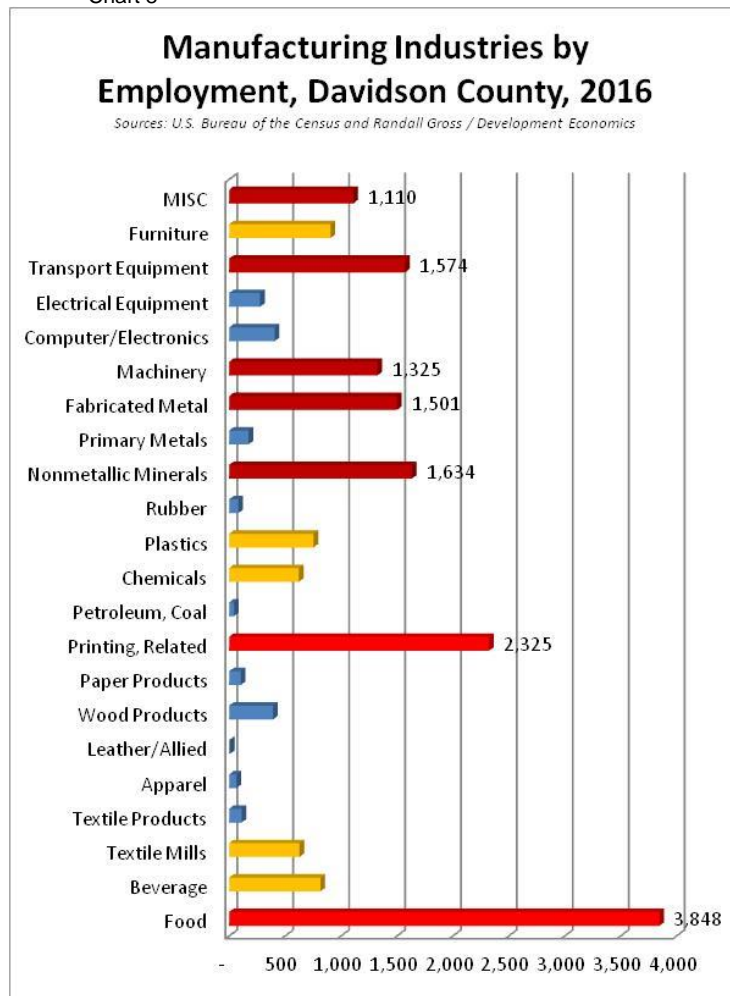
Chart 7



Based on the Census data alone, Davidson County still had 92 printing and related businesses in 2016, indicating that this industry still dominated the scaled production sector in the city. Nashville also had 69 food & beverage producers, 68 fabricated metal shops, and 52 miscellaneous manufacturers. There were only a handful of manufacturers in primary metals, rubber, and leather products, although this number may not include all artisanal “makers” of belts, accessories and other products. (It should be noted that local shoe companies like Nisolo and Peter Nappi manufacture their products overseas and not in Nashville, which is used more as a design and sales center).

As a point of comparison for the numbers of “makers,” the Nashville Fashion Alliance recorded 79 local apparel companies in 2015, including producers (which accounted for an estimated 49% or about **39** companies) as well as designers. The Census of Manufacturers in 2016 determined that there were 14 apparel companies; or in an expanded definition including makers of leather, textile, and jewelry products, the Census recorded a total of **36** producers, a number comparable to the NFA producer membership.

Chart 8



Again, based on Census of Manufacturing data, by far the largest manufacturing industry in Nashville is food & beverage, which collectively employed nearly 5,000 workers in the city in 2016. And since that time, several more distilleries, breweries, and cideries have opened. Printing and related products employ the second-largest number of manufacturing workers in the city, with about 2,330 in 2016. Other key manufacturing employers are non-metallic minerals (e.g., stone cutting, marble production, etc) with 1,630, transportation equipment (1,570), fabricated metal (1,500), and machinery (1,300). Miscellaneous manufacturers employed about 1,100 in 2016).

Companies engaged in apparel, leather, petroleum & coal products and rubber employed relatively few workers in 2016. But again, these numbers do not reflect the many **small-batch manufacturers** in these industries. According to the Nashville Fashion Alliance, that industry alone employed 1,600 workers in Nashville in 2015. The NFA finds that 49% of these workers are employed in manufacturing (with the rest being designers) so total production employment was **784**. The Census of Manufacturing recorded about **210** workers in apparel, textile, leather and jewelry production in Davidson County in 2016. So, it is likely that the Census has under-counted apparel-related manufacturing employment by about 570. (Although if one includes the 630 employed in textile mills, then the total related employment would be 840).

**Fast-Growing Manufacturing Industries.** According to the Census data, the fastest growth in terms of the number of establishments has been in medical equipment manufacturers, which expanded from 2 to 24 companies between 2007 and 2016, an increase of 1,100%. Beverage manufacturing has also expanded rapidly (borne out by the number of new distilleries, breweries, and cideries in the city), with growth of 190% between 2007 and 2016. Apparel manufacturing has also expanded rapidly, according to the Census, with the number of companies expanding by 75% over the ten-year period. This growth is consistent with information supplied by NFA, in which 79% of member companies had been founded after 2008.

The fastest manufacturing job growth in Nashville has been in medical equipment manufacturing, which has expanded from 60 to 173 employees in ten years, yielding a growth rate of 191%. That being said, the industry had grown to 750 employees by 2010 but had scaled back since then perhaps due to the departure of one large company. There has also been rapid employment growth in jewelry manufacturing (153%), miscellaneous manufacturing (42%), wood products (11%), beverages (9%), and food production (6%). The largest number of jobs was added in the food industry (200+), followed by medical equipment (114), beverages (70), and other miscellaneous (50).

**Declining Manufacturing Industries.** The largest decrease in jobs has been in printing (1,200), indicative of the shift from paper to online media. This dramatic decrease is worrying because of the size of the printing and publishing

industries in Nashville and that industry's overall impact on the local economy. Machinery manufacturing also saw a dramatic decrease, falling by 990 jobs since 2007. Other declining industries include textile products (640), textile mills (550), paper (360, again related to the printing industry), and computer/electronics manufacturing (320).

### Section 3. EXISTING INDUSTRIAL REAL ESTATE MARKET CONDITIONS

This section provides an overview of existing industrial real estate market conditions and context. Data on the regional industrial market and sub-markets was analyzed as background on the overall real estate trends impacting on the study area and surrounding urban industrial districts. Much of this data was sourced from local commercial real estate brokers, led by Cushman-Wakefield.

#### Nashville Sub-Markets

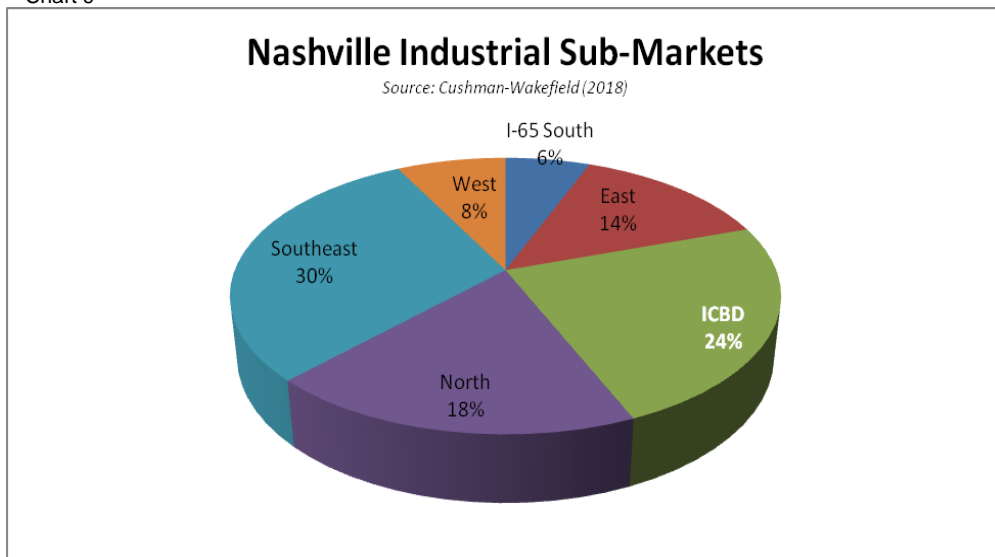
The Nashville industrial market is divided into six sub-markets: West, I-65 South, East, ICBD (Industrial Central Business District), North, and Southeast.



About one-third of the region’s industrial space is located in the Southeast Corridor. However, the ICBD, which includes the study area, has more than one-quarter of the region’s industrial space and ranks as the second-largest.

Map Courtesy Cushman-Wakefield.

Chart 9





## Inventory and Occupancy

The overall Nashville market has about 210 million square feet of industrial space (in buildings over about 10,000 square feet in size). Of this amount, 50.1 million square feet or 26% is located in the ICB and, based on the inventory conducted for this study, 2.2 million square feet of that amount is located in the study area. As such, the study area represents about 1.0% of the Nashville industrial market. It should be noted that “industrial” in this data refers to manufacturing, warehouse, and other industrial format buildings that are marketed primarily for industrial uses but may include other ancillary uses.

<b>Table 5. NASHVILLE INDUSTRIAL INVENTORY BY SUB-MARKET, 2018</b>			
<b>Sub-Market</b>	<b>Square Footage</b>		
	<b>Inventory</b>	<b>Vacant</b>	<b>Percent</b>
I-65 South	12,457,789	19,710	0.2%
East	28,940,088	1,272,207	4.4%
Industrial CBD	50,068,873	1,242,709	2.5%
<i>Study Area</i>	<i>2,190,982</i>	<i>51,350</i>	<i>2.3%</i>
North	39,118,941	2,009,397	5.1%
Southeast	63,089,296	2,756,688	4.4%
West	16,080,008	151,438	0.9%
<b>TOTAL</b>	<b>209,754,995</b>	<b>7,452,149</b>	<b>3.6%</b>
Sources:	Cushman Wakefield and Randall Gross / Development Economics.		

### Occupancy

Occupancy is currently very high in the region’s industrial space, with a vacancy rate of only 3.6%. The ICB and has an even lower vacancy rate of just 2.5% and, again based on the inventory conducted for this study, the study area has an even lower estimated vacancy rate of just 2.3%. These are among the lowest vacancy rates in the region, matched only by the West and I-65 South sub-markets. Thus, the central city is out-performing the market, in terms of occupancy. Overall, about 7.5 million square feet of industrial space is vacant market-wide, although this number includes newly-constructed space that is just leasing up.

**Inventory Trends**

The Nashville area industrial market added more than 29.6 million square feet of leasable industrial space between 2006 and 2018, an increase of 16.4% or about 2.5 million square feet per year.

<b>Table 6. INDUSTRIAL INVENTORY TREND BY SUB-AREA, 2006-2018</b>				
<b>Sub-Market</b>	<b>2006</b>	<b>2018</b>	<b>2006-2018 Change</b>	
			<b>Number</b>	<b>Percent</b>
I-65 South	12,423,000	12,458,000	35,000	0.3%
East	15,727,000	28,940,000	<b>13,213,000</b>	<b>84.0%</b>
Industrial CBD	46,981,000	50,069,000	3,088,000	6.6%
<i>Study Area</i>	<i>2,314,666</i>	<i>2,190,982</i>	<i>(123,684)</i>	<i>-5.3%</i>
North	42,824,000	39,119,000	(3,705,000)	-8.7%
Southeast	48,724,000	63,089,000	<b>14,365,000</b>	<b>29.5%</b>
West	13,467,000	16,080,000	2,613,000	19.4%
<b>TOTAL</b>	<b>180,146,000</b>	<b>209,755,000</b>	<b>29,609,000</b>	<b>16.4%</b>
Sources:	Cushman Wakefield and Randall Gross / Development Economics.			

During that 12-year period, the ICBD has added only about 3.1 million square feet, or 6.6% to its inventory. Most of this space was added through the development of a huge new warehouse/distribution complex on I-65 North in the Skyline area. The ICBD accounted for just about 10% of the growth in industrial space, despite being 26% of the total inventory. Meanwhile, the Southeast Corridor has added 14,365,000 square feet of industrial space and the East Submarket (which includes Wilson County) has added 13,213,000 square feet, also mainly in “big box,” column-free, highway-oriented warehousing and distribution facilities. The study area has seen a decrease of about 124,000 square feet of industrial space since 2006, based on assessment records on year-built but excluding demolished space. Thus, the decrease in industrial inventory could be more substantial in the study area if demolitions are included. It is noteworthy that the study area’s industrial inventory has been eroding at the same time that the central city and regional industrial real estate base is rapidly expanding.

**Rent Trends**

Nashville industrial market rents are averaging \$4.32 per square foot, based on data collected by Cushman-Wakefield. These data are consistent with

those from other sources. I CBD rents, at \$6.28 per foot, are second-highest in the market after those in the West Sub-market (\$7.70). Rents have increased by about 6.1% since 2016, or around 3.0% per year.

<b>Table 7. INDUSTRIAL RENT PSF TRENDS BY SUB-AREA, 2016-2018</b>					
<b>Sub-Market</b>	<b>2016</b>	<b>2018</b>	<b>2016-2018 Change</b>		
			<b>Number</b>	<b>Percent</b>	
I-65 South	\$ 3.82	N/A	N/A	N/A	
East	\$ 3.06	\$ 3.87	\$ 0.81	26.5%	
Industrial CBD	\$ 6.45	\$ 6.28	\$ (0.17)	-2.6%	
<i>Study Area</i>			<i>N/A</i>	<i>N/A</i>	
North	\$ 3.39	\$ 3.29	\$ (0.10)	-2.9%	
Southeast	\$ 4.21	\$ 4.96	\$ 0.75	17.8%	
West	\$ 5.80	\$ 7.70	\$ 1.90	32.8%	
<b>TOTAL</b>	<b>\$ 4.07</b>	<b>\$ 4.32</b>	<b>\$ 0.25</b>	<b>6.1%</b>	
Sources:	Cushman Wakefield and Randall Gross / Development Economics.				

Within the I CBD, rents have fallen by 2.6% (1.3% per year) since 2016. Rents have also fallen in the North sub-market. Some of this decrease is due to the addition of the large new Skyline warehousing and distribution facilities, which may have depressed rents temporarily while they are leasing up. Within key portions of the I CBD sub-market such as the study area, rents are still escalating, according to businesses and brokers.

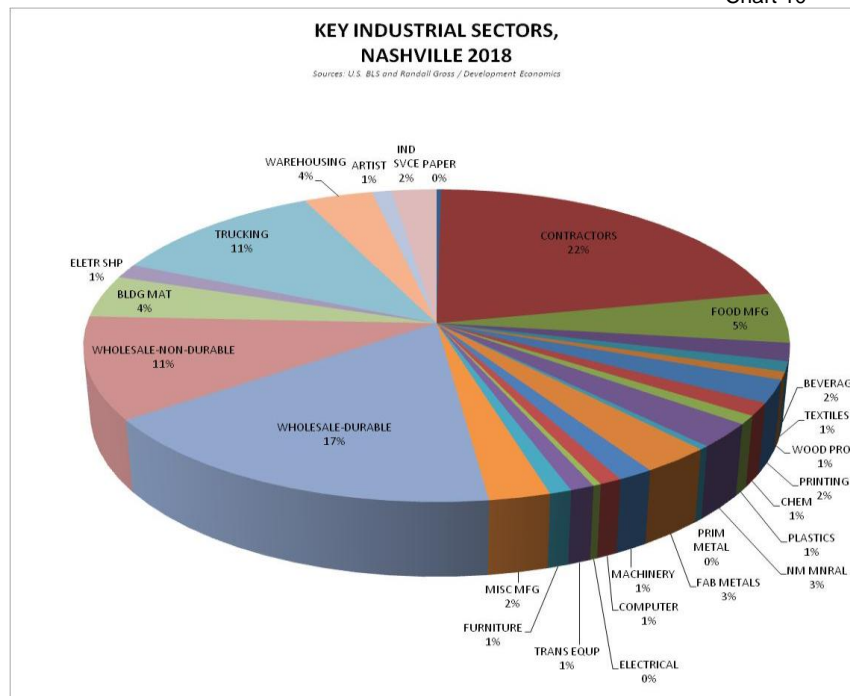
## Section 4. INDUSTRIAL MARKET ANALYSIS

This section summarizes findings from an Industrial Market Analysis for South Nashville, focused on the Wedgewood-Houston and Chestnut Hill neighborhoods. The market analysis forecasted demand for industrial development based in part on an examination of Nashville’s competitive advantages for certain industrial uses as well as on two differentiated economic scenarios: one based on industry-by-industry employment forecasts and the other based on local industrial real estate absorption cycles. Some understanding of the need for smaller spaces driven by small-batch makers and other businesses “under the radar” was also integrated into the demand forecasts. Potential for capturing industrial demand within the study area was then determined within the competitive context of Nashville’s urban industrial areas. Finally, a “targeted” mix of industrial uses was determined (as discussed in Part B) based on all of these inputs and on the area’s existing strengths.

### Competitive Advantages & Industry Concentrations

Section 2 of this report provided a broad overview of the regional and local economic base as context for an assessment of study area potentials. A more detailed assessment was conducted, focused on “industrial” employment and the city’s competitiveness for specific industrial sectors that drive demand for industrial real estate.

Chart 10



For the purposes of this analysis, “industrial” sectors include a broad range of industries in different economic sectors that drive demand for industrial real estate. Some of these industries are in the manufacturing sector, but others are in construction, transportation & warehousing, wholesale trade, and other sectors of the economy. Nashville-Davidson County’s largest “industrial” sectors include building contractors (22% of industrial employment), wholesale of durable goods (17%), wholesale of non-durable goods (13%), trucking (11%), food manufacturing (5%), warehousing (4%), and supply of building materials (4%). Thus, only one manufacturing industry (food) holds more than 3% of local industrial employment.

### **Position in 14-County MSA Region**

Within the 14-county Nashville-Murfreesboro-Franklin MSA, Davidson County has 59% of the industrial establishments and 45% of all industrial employment in the “industrial” sectors identified for this study. Davidson County has the largest share of the region’s apparel (81%) and accessory (100%) manufacturing, as evidenced by the city’s burgeoning fashion industry and its active representation by the Nashville Fashion Alliance. The city is also home to the region’s highest number of sugar and confectionary makers (e.g., chocolate, 99%), musical instrument manufacturers (95%), jewelry makers (94%), breweries & distilleries (85%), textile product manufacturers (83%, related to the apparel industry), adhesives production (78%), and HVAC equipment manufacturing (83%).

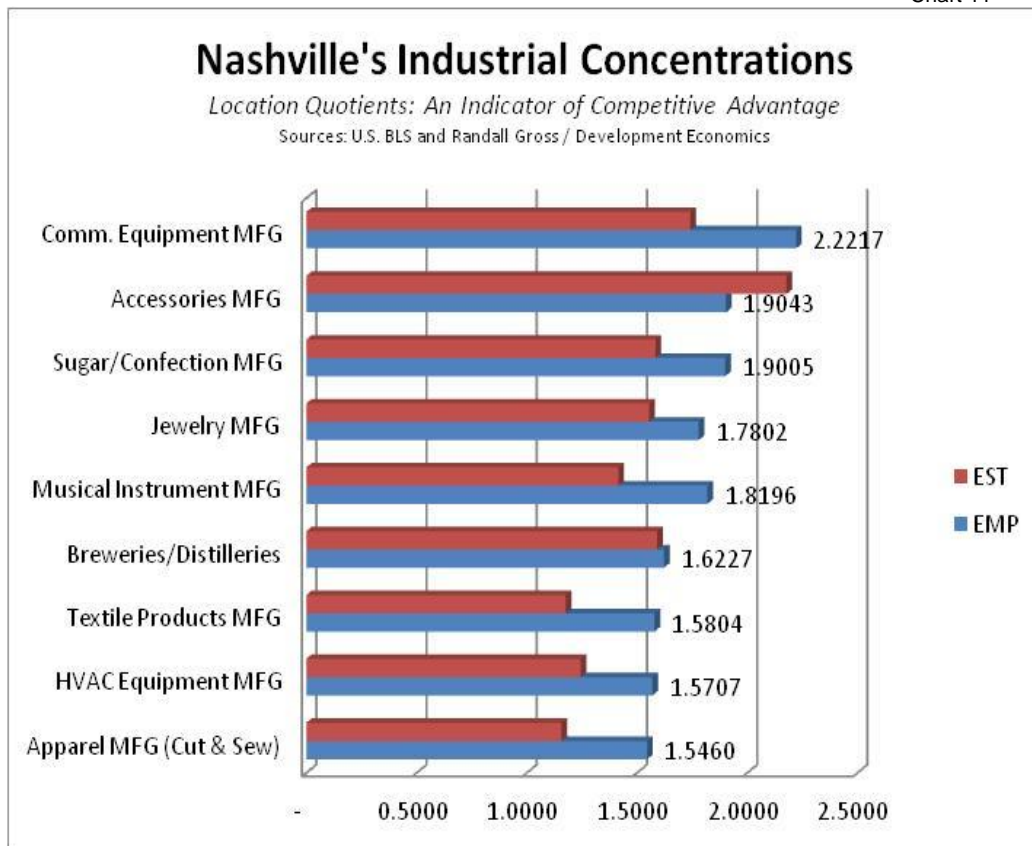
On the other hand, Davidson County has a relatively low share of the region’s fruit & vegetable canning operations (only 6%), soap & cleaner producers (6%), rubber product manufacturers (5%), electrical equipment producers (3%), transportation equipment manufacturers (3%), and ornamental metals makers and manufacturers (2%). At least one large rubber product manufacturer, Tennessee Mat Company (Wearwell, with 100+ employees) relocated from the study area to Smyrna in 2003.

### **Industrial Concentrations**

An analysis of the location quotients (LC) was conducted of Nashville’s industrial activity as compared with the region. LC’s are ratios that compare the share of a particular industry’s employment out of total employment in Nashville, with that of the same industry in the region as a whole. LC’s help identify unique concentrations of industries, which provides an indication of clustering and a competitive advantage for Nashville as a location for that industry. An LC of 1.0 indicates that the industry is no more concentrated in Nashville than it is in the rest of the region. But an LC of 1.2 or higher begins to suggest a strong concentration in Nashville and competitive advantages for a Nashville location. Nashville’s key industrial concentrations can be characterized as follows:

- **Candy, Clothes and Communications.** Nashville not only has a large share of the region's candy, apparel, and accessory manufacturers, but those industries represent an unusually high share of the city's employment base as compared with other parts of the region (with LCs of 1.9, 1.55, and 1.9, respectively). Communications-related equipment manufacturers are very highly-concentrated in Nashville compared with other parts of the region, with a location quotient of 2.22.
- **Music & Brewing.** It is no surprise to anyone that Nashville is the center of the music industry in the region, particularly with respect to musical instrument manufacturing (LC of 1.82). The city also has a high concentration of breweries, distilleries, and similar beverage producers (LC of 1.62), although the number of these establishments is now growing quickly in suburban counties.

Chart 11



The largest industrial cluster in the region is in transportation equipment manufacturing, with massive automobile and equipment production facilities for Nissan, Bridgestone, General Motors and other large anchors along with associated OEM suppliers and other companies. Transportation equipment manufacturing accounts for 22% (30,000) of all manufacturing jobs in the MSA, mostly associated with automotive industries. But Davidson County is under-represented in this cluster. Transportation equipment accounts for just 2% of

Nashville's manufacturing employment, with 745 jobs. This sector has a location quotient of only 0.5 in Nashville. Further, many of these jobs in Nashville are in aerostructures, barges, and other forms of transportation aside from automobiles.

### **Nashville Industrial Growth Trends**

Employment represented by the industrial sectors identified for this analysis account for about 76,700 jobs in Davidson County alone. This number is up by 15% or 10,100 jobs since 2014. Nashville has seen significant growth in certain industrial sectors, including specialty contractors (relating to the city's construction boom), which added 4,700 jobs for 40% growth in just five years. Warehousing employment increased by 1,600 jobs or more than 140%. Wholesale trade, food & beverage manufacturing (particularly bakeries, breweries, and distilleries), medical equipment production, electronic shopping, non-metallic minerals (e.g., marble and stone), and building material supply have also added hundreds of jobs. Growth among the last two industries (minerals and building supply) also relate back to the region's construction boom. Perhaps the fastest rate of growth has been in breweries & distilleries (370% in five years) and in medical equipment manufacturing (352%).

#### **Significant Growth**

• Specialty Contracting	+ 40%	+4,700 Jobs
• Warehousing	+ 140%	+1,600
• Wholesale (Non-Durable)	+ 19%	+1,300
• Wholesale (Durable)	+ 6%	+ 760
• Medical Equipment MFG	+ 352%	+ 750
• Food MFG	+ 16%	+ 530
• Bakeries	+ 92%	+ 370
• Beverages MFG	+ 55%	+ 500
• Breweries & Distilleries	+ 370%	+ 275
• Electronic Shopping	+ 57%	+ 410
• Non-Metallic Minerals (Stone)	+ 26%	+ 400
• Building Materials	+ 14%	+ 400

At the same time, the city has seen some decrease in employment in certain industrial sectors, including machinery & equipment manufacturing, where employment fell by 46% or 930 jobs (led by manufacturing of HVAC equipment, down by 81% or 820 jobs). Despite the region's growth in transportation equipment manufacturing, Davidson County has seen a 36% decrease in employment in that industry, with the loss of 420 jobs since 2014. Other declining industries include printing (down 9% or 180 jobs) and paper (down 21% or 50 jobs) that are related to the shift from print to online media.

**Significant Decline**

- Machinery & Equipment MFG - 46% - 930
  - *HVAC Equipment MFG* - 81% - 820
- Transportation Equip MFG - 36% - 420
- Printing - 9% - 180
- Paper MFG - 21% - 50

To summarize some of these changes, it can be said that some industrial growth (in contracting, minerals, and building supply) has been directly related to the city's construction boom. Other growth - such as in wholesale trade, bakeries, and electronic shopping - can be traced to an expansion of the Nashville-area population and market base. As noted previously, the shift from print to online media has accelerated growth in warehousing and transportation for electronic shopping activity, while depressing the market for paper and printing. Within the Wedgewood-Houston portion of the study area, information from businesses indicates that services are replacing manufacturing activities and digital processes are replacing paper.

**Employment-Based Demand Scenario**

Industrial demand was forecasted in part based on the trends and projected change in industrial employment through 2024 and beyond. Growth is expected among some of the same industries that have experienced an increase in employment over the past 5 years, but some industrial growth will slow or stabilize and other industries will accelerate. In general, industrial growth is expected to slow in the next five years due to a combination of factors, not the least of which is uncertainty over international trade agreements and other factors over which most local companies have little control.

The rapid growth in construction that has propelled local contractors, building suppliers, and stone producers to add large numbers of employees, is also likely to slow within the next five years. Part of this shift will result from the reversal of an extended development cycle that has generated demand for such suppliers. Contractors will add employment in the short term but are likely to start drawing back by the end of the five-year period. Overall, contractors should still gain a net 560 more employees by 2024. Similarly, stone and other mineral producers will add about 200 jobs, mostly in the near term.

Businesses associated with the growth of electronic shopping will continue to see gains even as the economy slows. Wholesale trade will add 2,200 jobs, trucking 900, and electronic shopping 300. Food & beverage, wood products, and medical equipment manufacturing are all expected to add jobs in the next five years. These numbers don't include "drop in" activities such as companies that decide to move a large operation to Nashville. Several recent transplants or



those under consideration at present include a paint producer (70 additional jobs) and a manufacturer of rockets (150 jobs). Declining industries are expected to include paper, printing, and electrical equipment manufacturers.

<b>Table 8. EMPLOYMENT FORECASTS FOR SELECTED INDUSTRIES, NASHVILLE-DAVIDSON 2014-2024</b>					
<b>Industry</b>	<b>2014</b>	<b>2018</b>	<b>2024</b>	<b>Change (Number)</b>	
				<b>2014-18</b>	<b>2019-24</b>
Specialty Contractors	11,808	16,530	17,093	4,722	563
Food Mfg	3,455	3,989	4,061	534	72
Beverage Mfg	919	1,423	1,698	504	275
Textile & Fabric Mills	477	521	547	44	26
Textile Product Mills	261	283	284	22	1
Apparel Mfg	961	811	759	(150)	(52)
Leather Prods Mfg	6	7	6	1	(1)
Wood Products Mfg	458	613	671	155	58
Paper Mfg	238	188	87	(50)	(101)
Printing	1,977	1,800	1,759	(177)	(41)
Chemicals Mfg	952	1,025	1,072	73	47
Plastics Mfg	610	611	617	1	6
Non-Metallic Min. Mfg	1,535	1,936	2,146	401	210
Primary Metals Mfg	232	299	338	67	39
Fabricated Metal Mfg	2,010	2,143	2,140	133	(3)
Machinery & Equip Mfg	2,021	1,094	1,084	(927)	(10)
Computer/Electrical Mfg	685	692	682	7	(10)
Electrical Equip Mfg	310	242	210	(68)	(32)
Transportation Equip	1,165	744	728	(421)	(16)
Furniture Mfg	666	675	673	9	(2)
Medical Equip Mfg	213	963	1,248	750	285
Misc Manufacturing	125	227	166	102	(61)
Wholesale-Durable	12,431	13,188	15,088	757	1,900
Wholesale-Non-Durable	6,837	8,109	8,413	1,272	304
Supply-Building Materials	2,947	3,349	3,365	402	16
Electronic Shopping/Mail Order	712	1,119	1,366	407	247
Trucking Services	8,507	8,774	9,670	267	896
Warehousing/Storage	1,154	2,767	3,383	1,613	616
Artists	1,092	793	710	(299)	(83)
Industrial Repair (excl AS)	1,850	1,813	1,795	(37)	(18)
<b>TOTAL</b>	<b>66,614</b>	<b>76,728</b>	<b>81,857</b>	<b>10,114</b>	<b>5,129</b>
Sources:	U.S. Bureau of Labor Statistics; TN DOL&WD; U.S. Bureau of the Census, & Randall Gross / Development Economics.				

**Competitive Context**

The study area will remain competitive for attracting certain industries, due to its superior location for businesses that require a central location in the region, access to the highway network, and proximity to downtown or music row. Businesses that attract artisanal craft workers will also be attracted to the study area because of access to a younger, skilled workforce. The study area is less-competitive for attracting businesses that require significant capital investment and land for large-scale facilities with low labor-per-foot ratios.

Within central Nashville, the study area retains some competitive advantages over areas like Germantown and the East Bank due to extreme pressure on land values. But most outlying industrial areas such as the Cockrill

Bend, Sidco Drive, Visco Drive, Elm Hill Pike, Myatt Drive, Metro Center, and Fesslers Lane areas remain competitive because they are less congested and there is more opportunity for reuse, redevelopment, and expansion.

**Demand and Study Area Potentials**

Based on projected employment growth among the various industrial sectors, and on trends in craft production, industrial development potentials were forecasted for the study area within the competitive context.

<b>Table 9. EMPLOYMENT BASED INDUSTRIAL POTENTIALS SUMMARY, STUDY AREA, 2019-2024</b>					
<b>Factor</b>	<b>Key Sectors</b>				<b>TOTAL</b>
	<b>CON</b>	<b>MFG</b>	<b>WHLS</b>	<b>OTHER</b>	
Total Employment	563	688	2,203	1,674	5,129
Industrial Use	422	601	1,527	798	3,348
Net Ind. Demand (SF)	195,514	348,658	1,996,989	1,183,066	3,724,228
<b>Study Area Potentials</b>	<b>29,327</b>	<b>53,845</b>	<b>39,940</b>	<b>32,998</b>	<b>156,109</b>
<i>Existing Use (SF)</i>	<i>112,877</i>	<i>939,749</i>	<i>161,303</i>	<i>545,873</i>	<i>1,759,802</i>
Sources:	U.S. Bureau of Labor Statistics; U.S. Bureau of the Census; Tennessee Department of Labor & Workforce Development; National Association of Industrial & Office Parks; Institute for Traffic Engineers; City of Sydney, Snonomish County, and other local governments; Metro Nashville Assessor; study area businesses; and Randall Gross / Development Economics.				

This analysis forecasted potential for about 160,000 square feet of net new industrial space in the study area over the next five years. If this growth were captured within the study area, it would represent an increase of about 9.0 percent over the current industrial inventory. The potentials would comprise of about 30,000 square feet of demand generated by construction industries, 54,000 square feet in manufacturing, 40,000 square feet in wholesale trade, and 33,000 square feet in various other industries including maker space.

**Absorption-Based Scenario**

Demand was concurrently forecasted using the absorption approach, based on industrial absorption trends and cycles, real estate indicators, competitive positioning, and other factors to determine the study area’s industrial potential over the next five years. Absorption refers to the change in occupancy among industrial-format buildings (manufacturing, warehousing, flex, etc), which can include some ancillary, non-industrial uses.

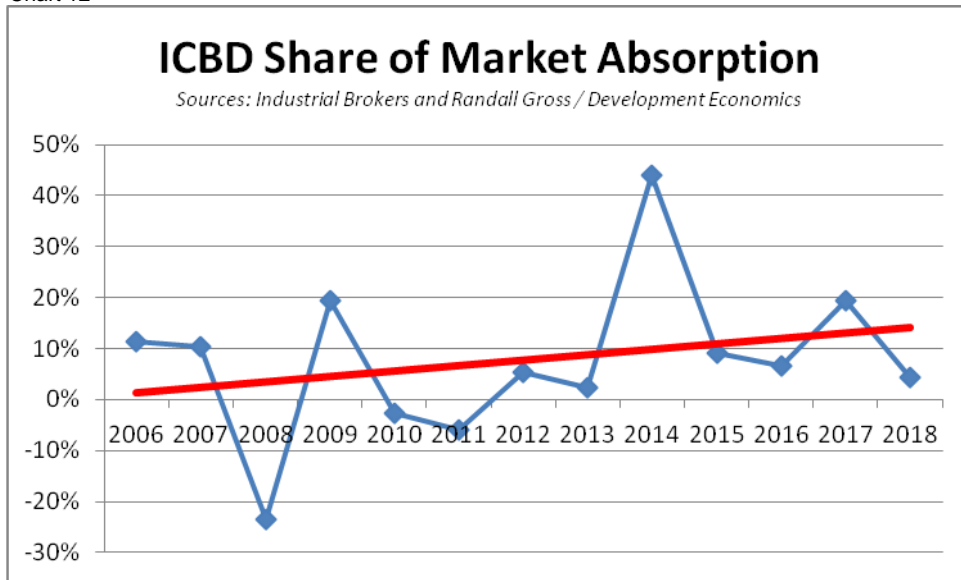
**Industrial Absorption Trends**

Industrial absorption trends were examined by industrial sub-market in the Nashville area. The market has absorbed a total of about 40.7 million square feet, or about 3.1 million square feet per year, over a 12-year period from 2006 to 2018. Of that amount, the Industrial Central Business District (ICBD) sub-area captured about 4.1 million square feet overall or 315,000 square feet per year.

Year	I-65 South	East	ICBD	North	Southeast	West	TOTAL
2006	302,000	2,000,000	743,000	1,892,000	1,157,000	385,000	6,479,000
2007	(28,000)	(316,000)	206,000	838,000	1,369,000	(92,000)	1,977,000
2008	64,827	1,530,611	(15,663)	(658,404)	(833,928)	(20,800)	66,643
2009	(324,471)	849,210	(411,800)	(346,046)	(1,691,160)	(210,349)	(2,134,616)
2010	(126,884)	(577,980)	80,515	916,261	(2,526,498)	(687,126)	(2,921,712)
2011	143,390	750,695	(221,834)	928,827	2,012,543	51,820	3,665,441
2012	29,333	1,865,130	323,297	203,329	3,691,363	10,097	6,122,549
2013	60,756	1,643,559	77,377	(364,222)	1,705,235	321,536	3,444,241
2014	228,407	1,458,089	1,577,875	(88,504)	312,069	100,650	3,588,586
2015	327,428	2,577,828	568,535	938,025	2,004,831	(86,290)	6,330,357
2016	(3,730)	1,053,416	401,177	730,787	3,845,215	103,310	6,130,175
2017	189,997	912,052	546,042	(514,319)	1,642,700	48,022	2,824,494
2018	68,463	996,684	222,569	1,525,010	2,424,294	(65,650)	5,171,370
<b>TOTAL</b>	<b>931,516</b>	<b>14,743,294</b>	<b>4,097,090</b>	<b>6,000,744</b>	<b>15,112,664</b>	<b>(141,780)</b>	<b>40,743,528</b>
<i>Per Year</i>	<i>71,655</i>	<i>1,134,100</i>	<i>315,161</i>	<i>461,596</i>	<i>1,162,513</i>	<i>(10,906)</i>	<i>3,134,118</i>
Sources:	Colliers International; Cushman Wakefield; Cassidy Turley; and Randall Gross / Development Economics.						

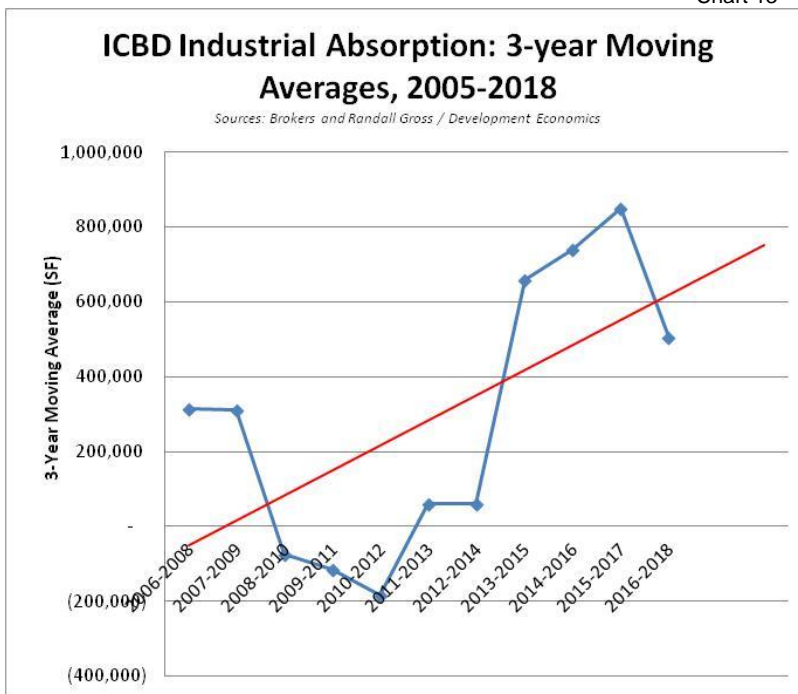
The market has seen positive absorption in all but two of the 12 years, and those two years occurred during the global financial crisis and real estate depression of 2009-10. The ICBP saw negative net absorption from 2008 to 2009 and again in 2011. Interestingly, despite the rapid growth of emerging industrial markets like Wilson County/I-840, where land is available for large-scale warehouse space, the aging ICBP industrial areas have actually captured an increasing share of market-wide absorption. That share has fluctuated to a peak of 44% in 2014 (with pre-leasing of the massive 600,000 square-foot Skyline Distribution Park), but the overall trend has been upward as illustrated on the following chart.

Chart 12



**ICBD Moving Averages.** An assessment of 3-year moving cycles helps to smooth out the overall trends in absorption. As shown below, the ICBD has seen an increasing trend in absorption, even after accounting for down cycles characterized by the period from 2008-2014. The sub-market has experienced its first downward trend in four three-year cycles, with absorption of about 500,000 square feet in the 2016 to 2018 period.

Chart 13

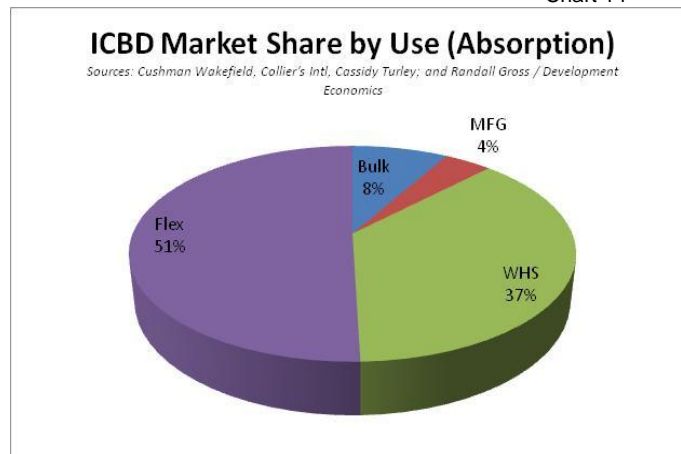


**Absorption by Building Product.** Three-quarters of market-wide absorption since 2006 has been taken by bulk distribution facilities, with only 5% in manufacturing, 6% in flex/R&D, and 14% in traditional warehouses.

<b>Table 11. TOTAL INDUSTRIAL ABSORPTION TREND BY BUILDING TYPE 2006-2018</b>					
<b>Year</b>	<b>Bulk Distrib.</b>	<b>Manufacturing</b>	<b>Flex/R&amp;D</b>	<b>Warehouse</b>	<b>TOTAL</b>
2006	4,139,000	226,000	442,000	1,672,000	6,479,000
2007	553,000	1,154,000	236,000	34,000	1,977,000
2008	1,733,096	(955,907)	153,880	(864,426)	66,643
2009	573,331	(854,304)	(224,751)	(1,628,892)	(2,134,616)
2010	(2,395,614)	(1,114,069)	2,518	585,453	(2,921,712)
2011	2,616,354	168,577	(80,098)	960,608	3,665,441
2012	4,202,212	1,357,239	177,763	385,324	6,122,538
2013	1,712,050	377,761	254,751	1,099,639	3,444,201
2014	2,641,167	(147,686)	541,850	553,255	3,588,586
2015	4,253,075	1,303,844	195,032	578,406	6,330,357
2016	4,357,716	136,748	301,465	1,334,246	6,130,175
2017	1,405,473	447,928	168,990	1,068,965	3,091,356
2018	5,076,238	(32,892)	128,024	N/A	5,171,370
<b>TOTAL</b>	<b>30,867,098</b>	<b>2,067,239</b>	<b>2,297,424</b>	<b>5,778,578</b>	<b>41,010,339</b>
<i>Per Year</i>	<i>2,374,392</i>	<i>159,018</i>	<i>176,725</i>	<i>444,506</i>	<i>3,154,641</i>
Sources:	Colliers International; Cushman Wakefield; Cassidy Turley; and Randall Gross / Development Economics.				

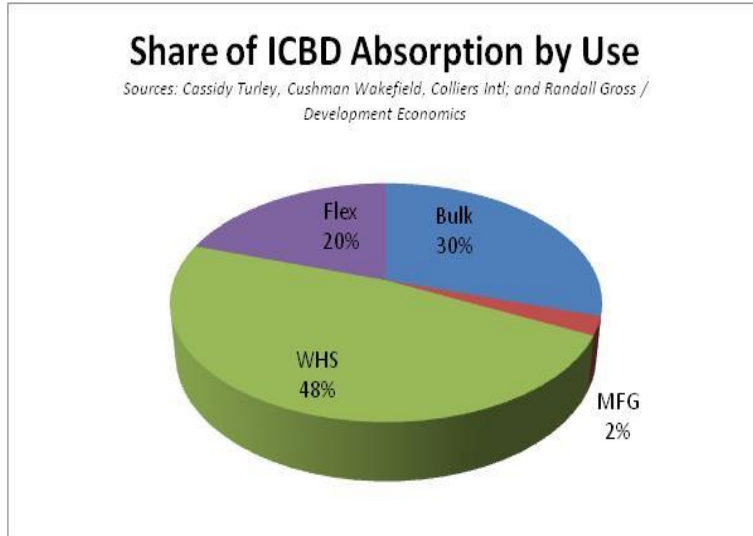
There are few sites within Davidson County that can accommodate the large, bulk-use facilities that have been springing up in Mt. Juliet, Lebanon, Smyrna, and other locations on the city’s suburban ring. ICBD flex space accounts for 51% of all flex absorption in the regional market, with warehouse accounting for a 37% share of the market. The ICBD has a relatively small share of either manufacturing (4%) or bulk (8%) space.

Chart 14



The study area is seeing increased demand for flexible space to accommodate services, office/warehouse functions, and small-batch manufacturing. However, warehousing has accounted for nearly half of all absorption in the ICB, followed by bulk (30%) and flex (20%) during a sample seven-year period.

Chart 15



Manufacturing has accounted for only 2% of industrial absorption in the ICB sub-market over the seven-year period.

**Demand and Study Area Potentials**

Demand within the ICB has ranged from 284,400 to 384,500 square feet per year, for an average of 334,400 square feet. It is anticipated that the study area would capture 84,100 to 211,500 square feet over the five-year period through 2024, or an average of about 147,800 square feet based on absorption.

<b>Table 12. ABSORPTION-BASED DEMAND &amp; STUDY AREA POTENTIALS, 2019-2024</b>			
<b>Factor</b>	<b>Low</b>	<b>High</b>	<b>Average</b>
ICBD Trend Area Forecast	284,357	384,446	334,402
Annual	16,823	42,289	29,556
<b>2024 (5-year)</b>	<b>84,116</b>	<b>211,446</b>	<b>147,781</b>
Source:	Randall Gross / Development Economics.		

## **Summary Potentials**

The various demand scenarios generate a similar result, with net potential for 140,000 to 160,000 square feet of industrial development in the study area by 2024, as summarized below.

- Absorption Scenario 147,800 square feet
- Employment Scenario 156,110 square feet

**POTENTIAL RANGE 140,000 to 160,000 square feet**

This demand could be accommodated in rehabilitated vacant or new industrial space within the study area, depending on the needs of the various users.

### **Caveats**

There are a number of caveats and assumptions associated with these potentials. First is the assumption that there would be **affordable** space available for flexible uses within the study area. As noted earlier, rents have doubled for some spaces within a very short period of time and building prices have risen by two to three times in just four years, based on sales and assessment records.

There is also the assumption that there would be pro-active industrial business recruitment to the study area, or at least to Nashville, within the five-year period. There would be enhanced definition and physical improvements to the study area, with targeted marketing for available and upgraded sites and buildings. There would also be increased attention to safety and security within the study area and surrounding areas. Finally, there is an increasing probability for a temporary economic adjustment over the next five years.

### **Metro Policies versus “Highest and Best Use”**

In Metro Nashville, it has been said in the past that the “private market will decide” how land use decisions should be made. But what happens when there are multiple, different private “market” choices for the same land? Further, there can be intervening decisions to be made in the public interest. Ultimately, it is not a question of whether there is a market for industrial space in the study area, since it has been shown that there is. But rather, whether industrial businesses can be accommodated as a “highest and best use” in a speculative land market like South Nashville where commercial and residential uses are fetching higher financial returns. Metro Government can make policy decisions to guide and accommodate industrial land uses for which there is a market and which may be in the public interest, or it can be guided solely by private real estate decisions.

## APPENDIX



# SOUTH NASHVILLE INDUSTRIAL STUDY

*Wedgewood-Houston and Chestnut Hill*

## **PART B: STRATEGIC RECOMMENDATIONS**



Final Report: November 26, 2019  
Prepared for the Metro Nashville Department of Planning  
By Randall Gross / Development Economics  
*With Wilmot, Inc.*

## **INTRODUCTION**

This PART B Report provides strategic recommendations based on the findings of the conditions assessments, business input, and industrial market analysis presented in the PART A Report. Recommendations are provided for marketing & redevelopment concepts; target business recruitment; zoning, design and land use policies; preservation; catalytic projects; incentives; business & employment retention & growth; environmental mitigation; program integration; and other strategic input. Case studies are provided as a guide for successful integration of industrial and mixed-uses in an evolving urban environment.

Section 1 of this PART B report provides recommendations for target markets for business retention and recruitment to this study area and its component parts. Section 2 provides information and input on employment retention and growth within the area. Section 3 presents concepts for marketing and development within the study area and its component districts. Section 4 recommends zoning and land use policies, while Section 5 recommends public interventions to assist with leveraging and implementation.

## **Section 1. TARGET MARKETS**

Specific existing and potential new business development opportunities were identified based on the findings of the industrial market analysis (see Part A), surveys and interviews, business concentrations, growth projections, and other factors. Target industries and specific business activities are recommended as appropriate to the study area and within specific neighborhoods. Specializations and unique “identity” characteristics of the potential industrial and maker base are also suggested to differentiate the study area from other industrial districts in the county.

### **Small-Batch Production**

WeHo has already established a reputation as a creative hub for artists and makers, or small-batch craft producers. Despite the ebb and flow of artists and craft makers in the study area, a somewhat unique identity has been established and it will be important to build on this reputation not only for recruiting and retaining craft producers but also other types of businesses and residents that may be attracted by the creative hub brand and identity. In fact, it is highly recommended that strategies focus on re-building or strengthening the population of creative businesses in order to help salvage the area’s reputation. Key target businesses include the following.

### **Specialty Foods**

As noted in the Part A Report, Davidson County continues to retain its position as a hub for food production, with a particular opportunity to build further concentrations in specialty foods production and supply, such as:

- Candy & confectionary production
- Bakeries
- Chili production
- Salads and other prepared foods like pimento cheese preparation
- Catering activities, including food truck supply.

Being centrally-located with highway access is essential for catering and fresh food production geared to the regional market. Plugging into Nashville’s burgeoning restaurant scene for co-branding opportunities will also present opportunities for building the F&B industries in the city.

The cluster of specialty food industries includes production as well as supply, catering, and distribution activities. Associated retail activities can also be integrated into this cluster including restaurants and bars, coffee shops, specialty food groceries and markets. In addition, the cluster can be further strengthened

through the integration of culinary training and associated programs offered for example through Nashville State or specialty training programs.

### **Craft Beverages**

The study area has already become an established hub for alcoholic beverage production, with three companies operating in this arena. Craft beverage production could be extended to include other types of locally-specialized alcoholic and non-alcoholic beverages.

- Breweries
- Distilleries and cideries
- Soft drinks
- Flavored water
- Other types of alcoholic and non-alcoholic beverages

Certainly tie-ins to the local restaurant industry and drinking establishments could benefit the neighborhood brand and local production. As with specialty foods, the cluster would include not only production but also supply, catering, and distribution activities. There is also the opportunity with beverage production to diversify the supply chain to include bottling and container producers or other down-stream suppliers to the beverage industry.

### **Clothing Accessories & Jewelry**

Nashville is the hub for the clothing accessories industry in this region and, coupled with the emerging fashion cluster, presents significant opportunities for growth. The study area has exhibited strengths in the presence of a skilled population of craft makers talented in both the design and production of accessories and jewelry. Unfortunately, this population base has been disrupted by redevelopment and escalating prices in WeHo. Still, if affordable opportunities are presented, there is the possibility of retaining and recruiting some of these types of operations in WeHo.

### **Cut & Sew Operations**

South Nashville has not seen the level of apparel design and production present in other areas of the city such as Marathon Village or Germantown. But the area does offer the opportunity for attracting more cut-and-sew operations if the right conditions are created to support this activity.

## **Full-Scale Manufacturing**

There is a need for retention of existing manufacturing in the study area, which is explored later in this section. But there is also the opportunity for some,

albeit limited, manufacturing business recruitment. There is also the need to promote business retention among the central city's manufacturing base.

### **Medical Equipment Manufacturer Recruitment**

Among the best opportunities is for recruitment of medical equipment manufacturing to the study area and to Nashville, in general. Memphis has long-targeted this sector but the industry has also been attracted to Nashville's skilled labor force and employment in the industry is growing rapidly.

More importantly, medical equipment and related manufacturing can provide an opportunity for expanding Nashville's health care cluster, which of course already includes the corporate headquarters, management and administrative hubs, and emerging tech centers for hundreds of health care companies. Nashville has lagged behind other health care centers in the development of its pharmaceutical and medical R&D sectors, but recent activities undertaken by locally-based entrepreneurs have aimed to fill this gap. Nashville's health care cluster could be fully realized with key components in management and administration, technology, pharmaceuticals, medical R&D, insurance, and medical equipment or instrument manufacturing.

Whether or not the study area is the most competitive location for medical equipment manufacturing in Nashville, opportunities can be created there because of its location near downtown and relatively close to the Midtown medical centers including Vanderbilt, TSU, and Meharry university-related research. But also because of the study area's positioning as a creative hub with a growing number of amenities for recruiting skilled workers.

### **Existing Manufacturing Business Retention**

The study area has an existing base of over 50 manufacturing companies and small-batch producers, including such diverse businesses as Grooms Engines, Socrateez Screen Printing, Structural Bolt & Manufacturing, New Heights Brewing Company, Pollock Printing, Woodstock Vintage Lumber, Diskins Cidery, Southbound Custom Musical Instruments, McGraphics Die Cutting, Vietti Foods, Warren Paint & Color Company, Dozen Bakery, and others. There is a need to encourage retention and growth of these businesses if not in the study area then at least within Davidson County, as they have made investments in the city and its labor force and add greatly to Nashville's overall economic diversity.

## **Construction**

The construction sector has proven to be among the fastest-growing and largest job-producing of all industrial sectors in Nashville. However, much of that growth has been closely tied to the city's real estate boom, which suggests that a likely downturn in the real estate cycle over the next five years will result in a

concurrent reduction in associated industrial activity. Nevertheless, over the long term, there will continue to be opportunities for construction-related business activity in the study area because of its location and overall competitiveness for such businesses. The following targets are therefore identified for recruitment and retention.

### **Specialty Contractors**

The study area is already home to a diverse collection of construction contractors and there is the opportunity to build on this existing base and offer a variety of one-stop-shop services as well as collaborative opportunities for businesses. Existing contractors range from plumbers to window installation companies to pavement contractors.

### **Wood Products & Building Supply**

Production and refurbishment of wood products has been long-established in the study area because of the presence of rail lines and lumber yards. Today, woodwork including cabinetry, furniture making, and wood refurbishment continue to produce products for the building industry and directly for the consumer. There are opportunities for retaining and recruiting more of such businesses, particularly those involving artisan craft work and small-scale production.

It should be noted that the Sidco Drive area has established itself as a center for home supply and furnishings, contractors, and interior design shops. As such, it is recommended that the various urban industrial areas develop brands around these clusters rather than competing against their individual strengths. Thus, the study area's business recruitment and branding around home & building supply should be focused more on artisanal craft production rather than interior design and furnishing. **Stone & marble cutting** and finishing operations provide another example of craft production that is already present in the area as a base for further growth.

## **Local & Regional Supply & Transport Services**

Because of its location and exceptional regional highway accessibility, the study area is particularly competitive as a center for wholesale trade, supply and transportation services. The lack of available, affordable land prevents large-scale development but smaller services and suppliers can thrive in the study area if appropriate space were to be made available.

### **Wholesale Trade**

Additional wholesalers and suppliers, particularly those supplying non-durable and durable goods for the **food & beverage and hospitality** industries, could be recruited to the study area.

### **Trucking & Logistics**

The area is competitive for attracting additional trucking and logistics services, including truck terminals, cardage companies, container yards and shipping companies. There may also be opportunities for electronic shopping support & warehousing. However, these uses may not be consistent with the other uses identified in this study or with concepts for branding and development in much of the study area.

## Section 2. BUSINESS & EMPLOYMENT RETENTION AND GROWTH

An assessment was conducted of existing and potential light industrial, maker, and arts uses to determine the opportunities for growing the employment base and enhancing access to these jobs among study-area residents. Recommendations are provided for job growth, access, and retention.

### Existing Employment Base

The existing study area employment base was estimated in terms of the number of jobs by type, salary range, and skills requirements. These estimates were made based on the inventories, surveys and interviews conducted as part of this study, coupled with association survey data.

Table 1. ESTIMATED INDUSTRIAL EMPLOYMENT, STUDY AREA, 2019			
Industry Cluster	Number	Jobs	Industries
<b>Construction</b>	<b>45</b>	<b>1,665</b>	
Building Supplies	13	659	Plumbing, Doors & Windows, Bolts
Construction Services	15	244	Contractors, Construction Mgt
Lighting/Electrical	8	281	Lighting Equipment Supply, Design
Non-Metallic Minerals	5	280	Granite, Stone
Paint	1	177	Paints and Coloring
Signs, Decals, etc	3	24	Signage, Wall Decals, etc.
<b>Transportation</b>	<b>30</b>	<b>469</b>	
Trucking	5	104	Trucking Services, Terminals
Automotive	25	365	Part Suppliers, Repair Services
<b>Information</b>	<b>26</b>	<b>1,161</b>	
Printing & Publishing	14	543	Silk Screen, Publishing, Printing, Stamps
Recording & Broadcasting	10	589	Recording Studios, Pressing, Broadcasting
Information Services	2	29	Data Processing, Web Services
<b>Art &amp; Design</b>	<b>19</b>	<b>337</b>	
Visual Artists, Designers	18	325	Artists, Jewelers, Architects, Photo, Costume
Musical Instruments	1	12	Musical Instruments
<b>Machinery, Tools &amp; Equip</b>	<b>13</b>	<b>332</b>	
Machinery & Equipment	10	309	Engines, Motors, Office Equip, Equip Svc
Tools	3	23	Tools, Tool & Die Shops
<b>Food &amp; Beverages</b>	<b>13</b>	<b>356</b>	
Beverages	7	197	Distilleries, Breweries, Distributors
Food	6	159	Bakeries, Chili, Catering, Distributors
<b>Wood &amp; Furniture</b>	<b>6</b>	<b>101</b>	
Wood Products	4	83	Lumber, Wood Refurbishment
Furniture	2	18	Furniture, Furnishings
<b>Sub-Total Clusters</b>	<b>152</b>	<b>4,422</b>	
General Wholesale Trade	10	185	Wholesale, Distribution
Other Industrial	6	110	Medical Supply, Recycling, Other
<b>TOTAL</b>	<b>168</b>	<b>4,716</b>	
Sources:	Institute for Transportation Engineers, Businesses, BOMA, NAIOP, and Randall Gross / Development Economics.		



Based on this analysis, it was determined that there may be as many as 4,716 jobs at 168 industrial companies within the study area. This includes about 4,400 jobs in industry clusters and another 300 at other industries. The largest number – about 1,700 – may be employed in various **construction-related** businesses, including general and specialty contractors, building & lighting suppliers, paint companies, sign makers, granite & stone cutters, and others. As noted previously in this report, construction employment is perhaps the most volatile among the study area industries, because of its association with real estate development cycles. So, while construction employment may be high now in concert with major construction projects in the downtown area, such employment could fall precipitously should there be a downturn in the real estate sector.

**Information-related** industries employ another 1,200 people in the study area. These industries include printing and publishing, which have been historically-concentrated but are now declining in Nashville. Recording, broadcasting, and data processing businesses are also a part of this employment mix.

The 30 **transportation-related** businesses employ an estimated 470 people in the study area, in truck terminals and services, along with automotive suppliers and services. “Industrial service” uses like auto and truck repair are more dependent on trends in the local consumer base than on regional or national markets.

Study area **food & beverage** businesses employ about 360 people in a diverse array of bakeries, distilleries, food manufacturing, and distribution operations. This number does not include the growing employment base in restaurants and drinking establishments. Similar employment (about 340) is found in **art and design-related** businesses, such as visual artists, designers, musical instrument manufacturers, photographers, costume milliners, etc. Also similar employment (330) is found in area **machinery, tools & equipment** industries, such as engine re-fabrication, tool & die shops, office equipment servicing companies, and others.

A smaller number (about 100) is employed in the **wood & furniture** cluster, engaged in wood refurbishment, cabinet and furniture making, and distribution. Employment in this cluster (especially cabinet-making) is also related to the cycles in the construction sector. While not a “cluster” per se, the 10 or so **wholesale** trade businesses located in the study area employ an estimated 190 people.

## **Employment Retention & Growth Opportunities**

Opportunities for employment growth and diversification were identified by type, skills requirements, and average salary based on the study area industrial market analysis and business potentials, as well as on information collection through the surveys and interviews. Salary data was compiled from U.S. Bureau

of Labor Statistics (BLS) survey data for the Nashville metropolitan area (2018 Occupational Employment Statistics). The types of jobs that could be retained or created are identified assuming that industrial uses would not be displaced by encroaching commercial and residential development. There is the opportunity to retain and grow jobs in the existing clusters and target industries as identified in this report. However, each of the industries is subject to different economic drivers and operational requirements.

Wages for industrial workers are near the middle of those for all workers in the Nashville MSA, but are among the highest for those workers who have achieved a high school education but not a college degree. This group represents the largest segment of workers who are unemployed or under-employed in the Nashville-area labor force. For comparative purposes, the mean hourly wage for manufacturing workers in the Nashville MSA was \$18.51 in 2018, compared to \$11.08 for foodservice workers, \$12.99 for personal care and service workers, \$15.51 for health care support workers, and \$18.40 for office and administrative support. Higher wages are achieved for professional and technical workers, management services providers and others for whom a college education or higher is required to qualify. The following provides more detailed annual salary information by type of targeted worker for the study area.

### **Small-Batch Manufacturing**

The study area is already home to a number of artisanal and small-batch manufacturing enterprises and offers opportunities for attracting more. Target industries identified earlier in this report include specialty foods, craft beverages, clothing accessories & jewelry, and cut & sew operations. Key employment growth and retention opportunities may include:

- Skilled or Managerial
  - Jewelry & precious stone workers \$51,270
  - Supervisors \$59,810
  - Cooks & head chefs \$57,240
- Semi-Skilled or Basic Labor
  - Pressers \$21,300
  - Bakers \$27,360
  - Food prep workers \$22,790
  - First-line food prep supervisors \$35,910
  - Grinding, polishing machine operators \$42,200
  - Food trimmers \$27,450
  - Food batchmakers \$34,200
  - Sewing machine operators \$27,380
  - Shoe & leatherworkers \$29,340
  - Helpers \$30,380
  - Hand cut & trim \$32,010
  - Cut & sew machine operators \$35,280

- Textile and apparel workers (other) \$41,720

### **Full-Scale Manufacturing (e.g., Medical Equipment)**

While the study area's traditional manufacturing base has eroded over time, there are still opportunities identified for retaining and attracting certain types of specialty manufacturing, including production of medical equipment.

- Skilled or Managerial
  - First-line supervisors \$59,810
  - Test, systems, other engineers \$87,500
  - Product development managers \$73,790
- Semi-Skilled or Basic Labor
  - Medical equipment & instrument repair \$44,170
  - Electrical/electronic assemblers \$38,150
  - Inspectors, testers \$38,890
  - Computer-controlled machine operators \$46,780
  - Machine shop \$42,260

### **Construction & Wood Products**

As noted above, the construction cluster, in particular, is most susceptible to downturns in the economic cycle especially in real estate. So, it is highly probable that construction employment (and business use) will decrease in the next five years), but there is also the strong possibility that the construction industry will gradually recover. Thus, allowing flexible use of construction business sites can help those businesses adapt to rapidly-changing conditions. Targeted construction industries identified in this report include specialty contractors and wood products & building supply. The types of jobs, skills, and salaries for construction-related businesses in the study area include:

- Skilled or Managerial
  - Skilled trades people (average) \$50,440
  - Skilled craftspeople (average) \$50,810
  - Lighting/other designers \$54,650
  - Construction managers \$60,950
- Semi-Skilled or Basic Labor
  - Helpers, stonecutters \$34,300
  - Cabinetmakers \$34,960
  - Furniture finishers \$38,600
  - Woodcutting machine operators \$34,980
  - Upholsterers \$30,280
  - Sawing machine operators \$26,410
  - Truck drivers, operators, haulers \$36,600
  - Installation, maintenance & repair \$39,640

### **Local & Regional Supply & Transportation Services**

Being located near the center of a growing metropolitan region provides advantages for transportation-related companies supplying services to consumers and industries alike. Fewer opportunities are likely to emerge in transportation equipment manufacturing or related production, although every opportunity for Nashville to capture more of the regional transportation manufacturing base should be explored. The targeted industries identified for the study area include wholesale trade (especially for food & beverage industries) and trucking & logistics. Key employment opportunities include:

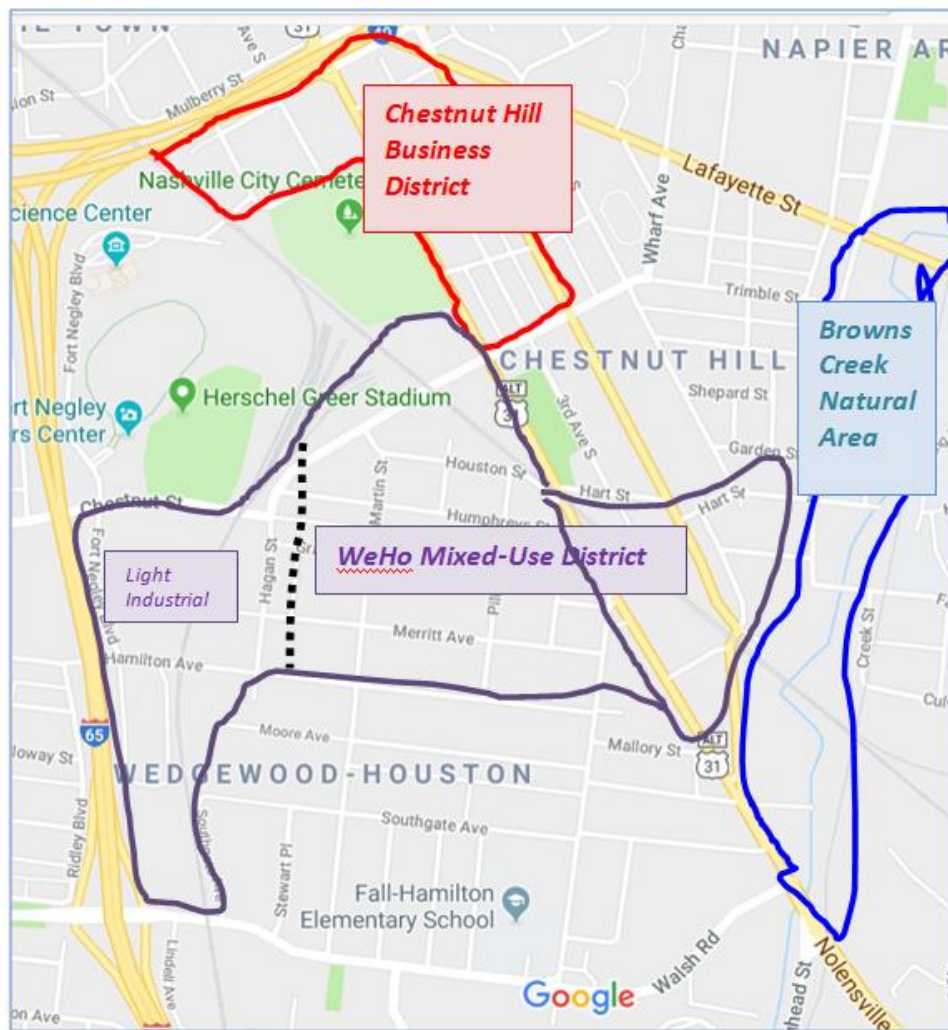
- Skilled or Managerial
  - First-line supervisors \$53,400
- Semi-Skilled or Basic Labor
  - Packers \$24,830
  - Laborer and freight stock \$29,600
  - Industrial truck operators \$34,030
  - Light truck & delivery services \$36,600
  - Heavy tractor/trailer drivers \$47,590

### **Other Industries**

There are opportunities to retain the workforce in existing study-area businesses, above and beyond the target industries identified previously. However, those opportunities are constrained in some cases by prevailing economic trends. For example, the information cluster contains the printing and publishing industries, which have been on the decline for many years in what was once one of America's largest P&P concentrations. Electronic media by contrast represents a growing opportunity within the study area and beyond in Nashville, with this area particularly suitable for sound stages, web-based businesses, and broadcasting uses, along with the ever-present recording industry. Skilled jobs in electronic media could include high wages for broadcast technicians (\$49,620), communications equipment operators (\$51,810), and sound engineers (\$56,570), for example. All of the target industries offer opportunities for both skilled and semi-skilled or non-skilled workers in today's tight job market.

### Section 3. MARKETING & DEVELOPMENT CONCEPTS

Marketing and development concepts have been generated, based on the market analysis, surveys, interviews, and other input to define distinct sub-areas for identify branding, marketing and business retention & recruitment. The concepts are also meant as a framework for refining zoning and land use policy, as well as economic development efforts, within the study area. Below is a map illustrated the rough boundaries of three proposed concept areas.

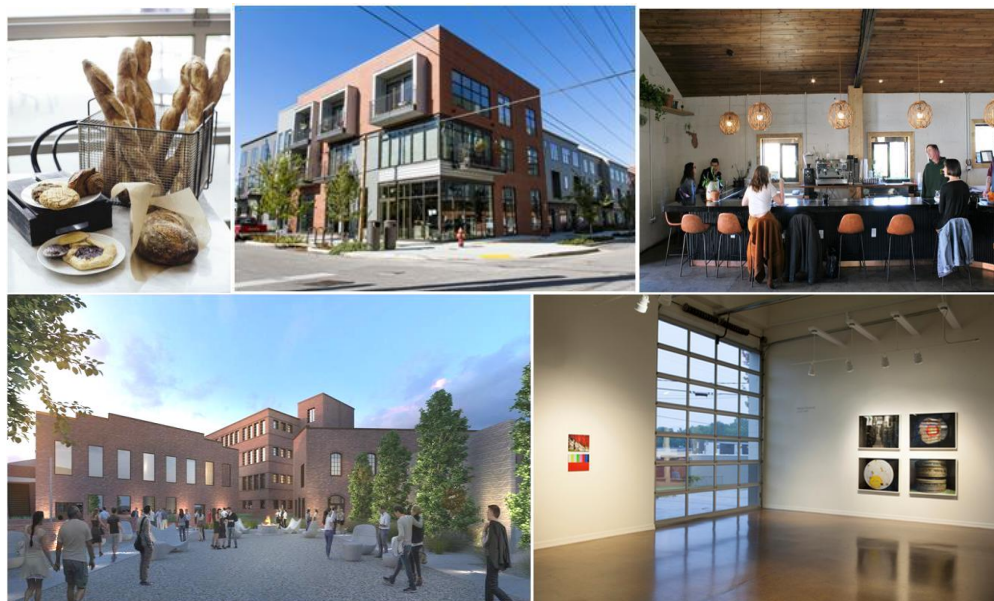


The three concept areas apply to “WeHo,” Browns Creek Natural Area, and Chestnut Hill Business District. Descriptions of the three marketing and development concepts are provided below.

#### Wedgewood-Houston (“WeHo”)

For the purposes of this study, the Wedgewood-Houston area is disaggregated into three sub-parts. The mixed-use heart of “WeHo” is bound by Hamilton Avenue (s), 4<sup>th</sup> Avenue South (e), the rail yard & City Cemetery (just north of Chestnut Street) (n), and Hagan Street to the rail lines (w). A secondary part of WeHo is located on the east side of 4<sup>th</sup> Avenue South (w) and bounded by Hart Street (n) and Lewis Street (e).

West of the rail lines is a portion of WeHo that is more oriented to “light industrial” and distribution uses. This area is bound by Hagan (e), Chestnut (n), Interstate 65 (w), and Wedgewood Avenue (s).



*Images courtesy: Dozen Bakery, Urban Land Magazine, DAAD Group, Zeitgeist Gallery, Daily Coffee News*

**WeHo Mixed-Use District.** Portions of Wedgewood-Houston had gained a reputation in the early 2000s as a hub for artisanal activity including a significant clustering of artists, craft makers, and small batch producers. Much of this activity was centered in the former May Hosiery Mill complex and Fort Houston. With the redevelopment of this property and “gentrification” of nearby housing and industrial space, there has been an upward shift in land values and investment that has priced some small businesses and artists out of this market. Fort Houston has relocated just outside of the study area to the Lindell Avenue area.

The area is no longer home to dozens of struggling artists and small makers. Incoming businesses like coffee shops, art galleries, boutique hotels, and offices for Apple Music create a different (but still somewhat art-themed) market dynamic. At present, the district encompasses perhaps one of the most diverse, truly “mixed-use,” areas of Nashville. It is recommended that every effort be made

to retain and enhance this diversity, by allowing a broad mix of uses, with an emphasis on those offering an “artisanal” component.

- Art galleries
- Artist studios and workspaces
- Craft & small-batch manufacturing
- Showrooms & design centers
- “Creative” office space
- Shared kitchen catering facilities
- Recording and broadcasting studios
- “Black box” theatres & theatre tech shops
- Sound stages
- Visitor experiences (United Record Pressing)
- Specialty retail
- Craft breweries and distilleries
- Restaurants
- Drinking establishments
- Boutique hotels
- Residential / mixed-use

This is the area where “WeHo Hip” can thrive, with businesses such as those already operating in or near the area like: Falcon & Flamingo, May Hosiery Complex, Bento Nashville, Jackalope Brewery, Corsair Distillery, The Finery & Diskin Cidery, Nashville Design Collective, Chandler Brothers Pool Hall, 9 Art Galleries & Shared Artist Spaces (Zeitgeist, et al), 14 Hip Restaurants (Bastion et al), Fork’s Drum Closet, United Record Pressing, Infinity Cat Records, Griffin Technology, and others.

Fort Houston is located nearby, but there is a need to encourage their growth along with the expansion of maker and small-batch manufacturing space throughout this area. United Record Pressing (URP) no longer manufactures at its historic site in the study area, but provides an exceptional opportunity for anchoring the district for visitor uses including a URP museum dedicated to integration in the recording industry and offering the experience of seeing working record pressing activity. Few things are more “hip” about Nashville than what URP can potentially offer at this site.

**WeHo “Light Industrial” District.** The portions of Wedgewood-Houston hugging east of Interstate 65 and west of Hagan Street past the rail corridor accommodate existing industrial and distribution uses that benefit from regional interstate highway and rail access, as well as proximity to downtown and midtown clients. By sequestering this district, there are opportunities to “protect” truck-heavy distribution and light manufacturing uses that would otherwise impact (or be impacted by) nearby residential and mixed-use development.



Existing Conditions

Existing uses in this area include Vietti Chili, Vanderbilt Printing Services, Warren Paint and Color Company, Border States Electric Supply, Franklin Equipment, WESCO Distribution, Enterprise Solutions, Truck Center Inc., Team Air Distributing, and other strictly

industrial uses. Retail and sales uses would be restricted. The types of uses included here and potentially locating in such a district include:

- Warehouse/Distribution
- Trucking terminals & transportation
- Light manufacturing
- Craft & small-batch manufacturing
- Wholesale trade and supply
- Construction contracting & supply
- Sound stages



Conceptual conditions, existing & improved  
Images courtesy Vietti Foods, Google, and iPark.

The concept for this area would include public and private improvements to enhance the physical environment and definition of the area, such as through landscape buffering, gateway signage, and designated truck access and parking.



**Chestnut Hill Artisanal Business District**

The Chestnut Hill Business District includes the “L-shaped” area bounded by I-40 (n), 2<sup>nd</sup> Avenue South (e), Chestnut Street (s) and the City Cemetery (w) to the railroad, as shown on the map. This area already accommodates a fairly homogenous mix of small service and supply businesses positioned along a rigid urban street grid. This area also has the advantage of having property controlled by a few interrelated owners, making it easier to plan ahead. These long-term owners are finally able to take advantage of rising rents and profit margins from their small properties, and appear to be in no hurry to sell for large-scale redevelopment.



*Images courtesy Monocle, DC Government, Post-Gazette, Asheville Today*

There are opportunities for enhancing this area as an “artisanal industries district” and a model for craft, small-batch production while also creating a unique visitor district and showplace for various Nashville Made products created by the many “graduates” of facilities like Fort Houston. There are fewer such

opportunities in the heart of Wedgewood-Houston, where properties are under large-scale redevelopment for mixed use that disperses and prices out small businesses and makers. Chestnut Hill already offers small, flexible and AC-serviced spaces that can accommodate a variety of creative uses. The district is potentially walk-able, and could accommodate pedestrian activity within walking distance from downtown.

While the district has a number of automotive and other service-related businesses now, there is the opportunity to gradually shift or “evolve” the mix to more artisanal (small batch) production-centered uses if certain incentives were offered to help leverage the creation of a maker district. Among the uses envisioned in this specialty district would be the following:

- Craft, small-batch manufacturing
- Music recording studios
- Architecture, engineering, and design studios
- Artist studios
- Art galleries & small showrooms
- Limited retail, service and F&B establishments (i.e., along Chestnut)
- Rehearsal studios and spaces
- “Black box” theatres & tech space (e.g., costume shops)

It is also envisioned that there would be public infrastructure and design improvements made to enhance the physical and pedestrian environment in the area. One helpful improvement would be the consolidation of parking lots and curb cuts along 4<sup>th</sup> Avenue South. Building façade improvements would also help enhance the appearance of the area. Improvements to the physical appearance and pedestrian environment can also help support the visitor experience at Nashville City Cemetery, located across the street from the two sides of the district. Targeted property and business incentives (discussed later in this report) would be offered to help leverage these changes over time and protect small businesses from wholesale redevelopment and displacement.

### **Browns Creek Natural Area**

As noted elsewhere in this report, much of the industrial use along Brown’s Creek lies within flood plain, and study area brown field sites are also clustered in this sub-area. Over time, it is envisioned that much of the area will “devolve” to conservation, as designated in the Nashville Next plan. The greenway would be extended along Brown’s Creek as an amenity for the Chestnut Hill and redeveloping Sudekum and Napier neighborhoods. Other recreation amenities could be integrated into parkland created along the greenway, such as playgrounds and nature interpretation. Some compatible industrial businesses near the greenway would likely chose to remain in the short- and mid-term.



Images courtesy: Mid-City Messenger (Lafitte Greenway) and Curbed Atlanta (Proctor Creek Greenway),

All of these actions will help reduce ground and water pollution, mitigate flood issues, and reduce costs through increased attention. “Compatible” industrial businesses along the greenway might include:

- Craft and small-batch manufacturing
- Small suppliers and wholesale trade
- Environmental / engineering consultants and services
- Testing services
- Breweries and distilleries
- Research & development

The role of Metro Government in working with industrial property owners and “devolving” industrial use in this area is discussed later in this report.

## **Section 4. PLANNING & ZONING POLICY**

Prospective zoning, design, and land use policies are recommended here, including models for integration of industrial, maker/artisanal, residential and retail mixed use. The role of automotive repair and other “non-aligned” industrial service businesses is discussed. Strategies are developed for integration of mixed-use and compatible uses in a way that strengthens overall marketing and development concepts while preserving neighborhood identity and affordability, where possible.

### **Case Study Review**

A review of comparable land use policies or best practices was conducted for communities that have successfully integrated and retained for the long-term their light industrial and maker/artisanal business base, while accommodating market-rate residential and commercial development. Many of the consistent themes identified for this type of area relate to findings presented to the City of Seattle, in recommendations on urban industrial retention and development in the Puget Sound Region presented by Seattle’s Commercial Affordability Advisory Committee. These recommendations are summarized as follows:

- 1) Identify and protect priority users of industrial lands
- 2) Limit non-industrial uses on industrial land (while ensuring adequate non-industrial land for non-industrial uses elsewhere)
- 3) Increase the supply of land zoned to accommodate low-impact industrial uses
- 4) Retain large parcels for large industrial needs
- 5) Work with industrial businesses to improve space efficiency and land utilization
- 6) Simplify regulations to improve permitting efficiency
- 7) Develop a strategic planning framework for industrial sub-areas
- 8) Take advantage of industrial revenue bonds (IRBs)

One of the strategies that can be employed in the study area is an effort to “seek out industrial tenants that can operate on the upper floors of existing industrial buildings.” As noted in the Puget Sound report,

*In dense, urban subareas, one alternative to accommodating forecast jobs would be to increase employment densities. Attracting manufacturing businesses that can operate on the upper floors of multi-storied buildings would be one strategy. In designated mixed-commercial and industrial districts, allowing small-scale manufacturing (i.e., artisanal and craft industrial uses) to locate in mixed-use buildings alongside retail or office uses can also increase employment densities while reserving space in industrial districts for more intensive industrial uses.*

In fact, cities throughout the world have long accommodated industrial uses in multi-storey and other high-density building environments. The Brooklyn Navy Yard redevelopment is filled with repurposed industrial buildings as high as 30 stories that accommodate small cut-and-sew operations, photographic and other artist studios, woodworking shops, computer-aided design and 3-D printing businesses, specialty food producers, and others making art and small batch products.

Many Asian and European cities have mid-rise industrial complexes of 6, 7, or 8-storeys designed to accommodate small industrial businesses engaged in hand-craft and small batch production. Peoria's mile-long warehouse district is filled with mid-rise Victorian-era warehouses that once served as the nation's largest liquor distribution center and are now being used for traditional manufacturing, office, and emerging maker uses. The Baltimore Art Tower in downtown Baltimore once served as the headquarters office for the Bromo Seltzer Company and now houses dozens of artist and maker studios on each of its 30 floors.

It has long been recognized that industry clustering can promote economic activity by encouraging networking, nurturing new ideas, sharing resources, and creating a skilled workforce. The clustering of arts and maker activities is no exception. An important example of where this is translated into policy is in the many arts, cultural and cultural industry districts established throughout the United States and beyond. Many, but not all, of these special districts are established through enabling legislation at the state level as an economic development tool. In fact, Tennessee lags far behind states like Virginia, Louisiana, Maryland, and others that package a variety of state and local tax, regulatory, and other incentives in designated districts to promote and development their arts communities. In promoting the development of "creative class" industries, these states and municipalities hope to spur spin-off in technology and other forms of economic development. Many states leverage their income tax or use property tax credits as key tools for directing development to arts districts. Tennessee does not have access to either of these bases but there are other opportunities for reducing the cost of business or the end cost to consumers, and providing a leg up for small artisan businesses.

## **Zoning and Land Use Policies**

Zoning and land use policies were reviewed and recommendations made based on the marketing and development concepts as presented earlier in this report. Ultimately it is highly recommended that major changes to zoning that result in a more restrictive development policy ("sticks") be coupled with incentives ("carrots") to ameliorate their impacts but also to leverage property owner support.

### **WeHo Mixed-Use District**

The Government of Metro Nashville and Davidson County has already taken steps to allow for low intensity industrial uses and to encourage mixed-use spaces by reevaluating zoning ordinances and adopting an Artisan Manufacturing Zoning Amendment in August 2015.<sup>1</sup> This zoning amendment has allowed for artisanal production such as metal work, food and bakery products, and printmaking in mixed use districts, permitting retail space to exist alongside production space. Prior to this zoning amendment, industrial zoning did not include a mechanism allowing for the co-location of retail space and industrial production. This amendment has already proved successful in the Wedgewood Houston neighborhood, and WeHo Mixed Use District in particular, with developments like Twelve60 Martin already completed as well and others planned or underway, bringing maker and live/work spaces to promote creativity and cultural identity within the district.

That being said, there are opportunities to refine the regulatory environment in WeHo to prioritize the integration of key, appropriate uses. In order to allow for *appropriate* low-intensity industrial uses, the following are recommended for the WeHo Mixed Use District:

- Create a specific plan district. (In the WeHo Mixed Use District, current zoning includes IWD, IR, MUL, MUL-A, and CS). Consider the creation of a specific plan district, otherwise referred to as “SP,” within the boundaries of the WeHo Mixed Use District that encourages mixed-use areas and artisanal manufacturing or maker spaces. This SP could allow MUL-A zoning, which permits artisanal manufacturing within it and would encourage the creation of a walk-able neighborhood. Further, the SP would specify the allowance of light industrial uses as well.
- Prioritize appropriate industrial uses: Currently, all industrial zoning districts – IWD, IG, and IR – allow, without restriction, for low-priority uses that are permitted elsewhere. Such uses include but are not limited to:
  1. New automobile sales
  2. Automobile service
  3. Home improvement sales
  4. Liquor sales
  5. General office

Table 2 below shows these existing permitted land uses and their respective zones.

---

<sup>1</sup> ORDINANCE NO. BL2015-1121: An ordinance to amend various sections of Title 17 of the Metropolitan Zoning Code related to artisan manufacturing and associated uses. Proposal No. 2015Z-009TX-001. Nashville and Davidson County Metropolitan Code. (2015).

Table 2: Permitted Zones for Various Non-Industrial Land Uses

Land Use	Permitted Zones other than Industrial
Automobile sales, new	CL and CL-A, CS and CS-A, CA, DTC (South, West and Central), SCR
Automobile service	MUL and MUL-A, MUG and MUG-A, MUI and MUI-A, CL and CL-A, CS and CS-A, CA, CF, DTC (North, South, West and Central), SCC, SCR
Home improvement sales	CL and CL-A, CS and CS-A, CA, CF, DTC (North, South, West and Central), SCC, SCR
Liquor sales	MUG and MUG-A, MUI and MUI-A, ORI and ORI-A, CL and CL-A, CS and CS-A, CA, CF, DTC (North, South, West and Central), SCC, SCR
General office	MUL and MUL-A, MUG and MUG-A, MUI and MUI-A, OL, OG, OR20 through OR40-A, ORI and ORI-A, CL and CL-A, CS and CS-A, CA, CF, DTC (North, South, West and Central), SCC, SCR

Sources: Metro Nashville Government and Wilmot.

Excluding the above uses from industrial zoning districts (with the possible exception of general office) will increase the amount of space preserved for industrial uses while maintaining affordability for industrial businesses. In particular, allowing for automobile dealerships can drive up property values and rent since they are often more profitable land uses than industrial uses and hence are willing to pay a higher rent.

An alternative to general office might be a more specific definition for “creative office” such as that proposed and promoted in several of the new projects being developed in the study area. A new “creative office” definition allows for more flexible use of office floor plate for the interface between small batch production and new technology development, along with sales and other traditional “office” functions.

- Create small batch business floor-area incentives: Create an incentive to develop a minimum square footage of ground-floor microenterprise space for small manufacturing businesses. For example, an incentive could be to provide a density bonus in exchange for development of affordable space for production within a new mixed-use project. This type of regulatory incentive could add significant value that will allow for vertical development and enhanced financial returns from land and can reduce pressures for commercial re-zoning.

### **WeHo Light Industrial District**

It is recommended that Metro Planning craft a policy that is separate from the WeHo mixed use district's and helps to define the appropriate geographic boundary between these policies in the study area to protect the district's current intensity and reduce the threat of "encroachment" from consumer-oriented commercial and mixed-use development.

The most appropriate border between the Light Industrial District and WeHo Mixed Use District is just west of Hagan Street. To the west of Hagan Street and to the western edge of the study area would be the "Light Industrial" District and to the east of the rail lines and Hagan Street would be designated the WeHo Mixed-Use District.

It is important to note that just to the west of Hagan Street, some mixed-use activity has been recently developed including Dozen Bakery, Zeitgeist and Nashville Craft Distillery. This northeast corner of Chestnut Street and 4<sup>th</sup> Avenue South would be included with the Mixed-Use District. In order for higher-intensity industrial uses proximate to the WeHo Mixed-Use District to be successful, the following is recommended for the "Light Industrial" District:

- The border between districts should accommodate light industrial and mixed-use activity along the western side of Hagan Street at least in part to gradually transition from the WeHo Mixed Use District to industrial uses of higher intensity. In order to do so, areas west of Hagan Street and north of Hamilton (but east of the railroad tracks) should be deemed an SP that accommodates MUL-A uses in addition to light industrial uses.
- Retain current zoning in the district: Parcels in the "Light Industrial District" are primarily zoned as IR. Additionally, in various places – excluding the north-eastern corner of the district described above – MUL-G and IWG zoning exist within the district. Given the size of the district and its proximity to the railroad and interstates, light and medium industrial activity is appropriate for the majority of the district and is reflected by the current land use. Since the district is fairly limited in size and very close to residential and walk-able, mixed-use areas, the industrial activity should remain enclosed and appropriate circulation patterns for truck traffic should be encouraged such as through directional signage.

### **Chestnut Hill Artisanal Business District**

The concept for Chestnut Hill's Artisanal Business District is for regulatory policy to accommodate and encourage small-batch industrial uses and limit other uses in this context. Exceptions would be limited to small-scale retail and perhaps upper floor office use. The aim is to establish a branded, destination small-batch ("maker") industrial and artisan area.



With high conversion pressures in the Chestnut Hill Artisanal Business District as a result of the area's proximity to Nashville's CBD and the speed of redevelopment underway, stricter policies that protect industrial land use are necessary to achieve the vision for an artisanal maker area in this district. Currently, much of the Chestnut Hill Artisanal Business District is zoned as CS. Additional zoning includes IWD, CF, R6 and MUL-A and MUN-A. Recommendations to achieve a small batch industrial "maker" district include:

- Create an artisanal and maker space-specific plan district: Consider the creation of an SP for this district that places greater restrictions on uses other than light and artisanal manufacturing than current industrial zoning districts allow. Permitted uses may include but are not limited to:
  - Density bonuses, similar to those recommended for the WeHo Mixed-Use District.
  - Restriction of ground-floor uses to industrial. This could be achieved by requiring that a percentage of the total ground-floor space in the area must be reserved for artisan and maker uses (e.g. light industrial, artisanal manufacturing, artisan distillery, and microbreweries). This will allow some retail and small scale commercial activity but will incentivize and retain primarily industrial use. If combined with the density bonus, then the allowance for ground-floor retail could be expanded.
  - Craft incentives for studio and other small work spaces to encourage maker activity within the district (see further sections of this report).
  - Restrict floor space for land uses outside of industrial uses
    - 1 to 2 floors of office on levels other than ground floor
    - No residential except artist live/work space on levels other than ground floor
    - Retail uses restricted to the Chestnut Street corridor
- Leverage tax incentives: Connect community development corporations or private developers to new market tax credits (NMTC) or historic preservation tax credits (HPTC) to reduce the cost of redevelopment for a project.

### **Browns Creek Natural Area**

Here the concept was to restrict further industrial development, encourage storm-water management and environmental protection, and also to encourage "compatible" design standards appropriate for floodplain and greenway-fronting industrial properties.

Although there are currently no SPs or urban design overlays (UDOs) within Metro Nashville that specify design standards for the adjacency of open space, Metro Nashville's Community Character Manual – a result of NashvilleNext – offers

design principles for conservation areas with environmentally sensitive features including floodplains and floodways.

In conservation areas, any new development should be minimal to protect water quality, minimize infrastructure and public service costs, and preserve the unique environmental diversity of Davidson County.<sup>2</sup> Conservation policy is applicable to Browns Creek for:

1. Areas that have been developed but retain environmentally sensitive features (e.g. floodplain and floodway) that need protection if redevelopment or further intensification occurs
2. The remediation of environmentally sensitive features that may have been compromised during site construction.

The Community Character Manual states that, “In the absence of acceptable development proposals, sites that contain existing uses and/or zoning that are inconsistent with [conservation area policy] and are no longer viable should be rezoned to be more compatible with the applicable policies.” As a result, no further development inconsistent with conservation policy from NashvilleNext should be developed within this district. After current uses cease, areas within the floodplain and floodway should be rezoned with an SP that restricts uses significantly and complies with conservation efforts for environmentally sensitive features as described by the Community Character Manual.

The Community Character Manual gives the following design principles for environmentally sensitive land features:

1. Floodplains
  - Avoid the clearing of trees and brush
  - Portions of the floodplain or waterway may be incorporated into private or public open space associated with parks, recreation, and civic uses
  - Low-intensity land uses are developed in portions of floodplains that are permitted to be disturbed, keeping disturbance to a minimum
  - Lands within the floodplain and floodway that have been compromised by development should be reclaimed and protected during redevelopment
2. Floodways
  - Development does not occur in floodways
  - Development should be grouped elsewhere on the site, the site is consolidated with an adjacent property to produce a developable site, or development rights are transferred

---

<sup>2</sup> Government of Metro Nashville. (2017) NashvilleNext Volume III: Community Plans – Community Character Manual.

In addition to design principles offered for conservation areas resulting from NashvilleNext, Metro Nashville has also implemented various requirements for developers for storm-water management. The requirements include incorporating low impact development through green infrastructure features to meet a development site's post development storm-water runoff water quality requirements. Green infrastructure methods such as bio-retention, permeable pavement, and reforestation both reduce and improve storm-water runoff by treating water in ways nature intended.

Additionally, Metro Nashville's storm-water management policy requirements for developers requires new development sites and significant redevelopment sites to preserve water quality buffers along Metro's community waters, including streams, rivers, springs, lakes, ponds, and wetlands.<sup>3</sup> The enforcement of existing Metro storm-water management requirements in areas adjacent to the Browns Creek Natural Area can enhance the conservation policy envisioned by NashvilleNext while also preserving the area's natural environment, protecting water quality and promoting flood control.

---

<sup>3</sup> Government of Metro Nashville. (2019) Water Services Information for Developers.

## **Section 5. PUBLIC INTERVENTIONS**

Section 5 recommends various types of public interventions intended to sustain, promote and leverage business and property development in the study area, consistent with the marketing and development concepts presented earlier in this report. Catalytic infrastructure projects are identified, along with various types of incentives and leveraging mechanisms. Approaches for integration of other public initiatives are provided. Finally, the role of Metro Nashville Government is discussed vis-à-vis the role of public-private partnerships, non-profits, and institutional development.

### **Infrastructure Development**

Several recommendations are made for priority improvements to the capital infrastructure within the study area. Clearly, expenditures for capital improvements would need to be considered within the broader framework for project funding within the area and county-wide. Still, this information can inform broader efforts to prioritize capital projects for funding within Metro's capital improvements program. The use of Industrial Revenue Bonds (IRBs) should be encouraged because of their direct relevance to the infrastructure projects identified below as mechanisms for leveraging industrial development and business retention in south Nashville.

It should also be noted that aesthetic improvements, such as those recommended for the Chestnut Hill Business District and WeHo can and often do enhance the marketability of associated properties which, in turn, can generate higher fiscal returns to Metro Government. Thus, investments in pedestrian infrastructure often pay for themselves in the long run.

### **Rail-Road Modal Interface**

There has been a need identified among businesses, residents, and through travelers for improvements to the rail crossings in the study area. Specifically, the direct interface between road and rail traffic increasingly causes traffic delays through the area. Such issues will only worsen with business and resident population growth within the study area, and with major development including stadia and audience support venues, on the periphery of the study area. While this study does not comment on the engineering solutions to the issue, there is certainly the desire among residents and businesses to separate rail and road traffic where possible.

### **Chestnut Street Corridor**

Chestnut Street is the major east-west spine road through the study area and serves as the commercial “main street” for both Chestnut Hill and WeHo. Upgrading of this street through urban design improvements relating to lighting, sidewalks, and pedestrian accommodation would help enhance the marketability of the area and create better linkages between Sudekum-Napier, Chestnut and WeHo to Wedgewood Avenue.

### **Chestnut Hill Artisanal Business District**

Streetscape improvements are recommended throughout the Chestnut Hill Artisanal Business District, aligned with the marketing and development concept presented in this report. Ultimately, it will be important to enhance the pedestrian environment as one way to encourage the activation of a visitor and consumer market for Nashville Made goods. Consolidation of curb cuts and parking should be encouraged, especially since there is a handful of property owners with multiple adjacent properties in the area.

Landscaping, lighting, and sidewalk improvements along 4<sup>th</sup> Avenue should be implemented to enhance the interface between this district and the Nashville City Cemetery and to improve the pedestrian environment. Urban design improvements should also be extended south to the Fairgrounds as a way to link downtown and the study area with this emerging sports and entertainment node. Gateway features should be integrated at the south side of I-40 and potentially, there could also be district-specific branded signage, along with **public art** integrated throughout the district. Property owners should be encouraged to make building façade improvements to enhance the aesthetic appeal of the area where possible.

**Downtown Access.** Pedestrian accessibility to downtown should be improved, as highlighted by employees at businesses in the area. Over time, the Chestnut Hill Artisanal Business District can be seen as a specialty district within the downtown area. So, the sharp distinction cut by the interstate highway between “downtown” / SoBro and everything else south of the loop can be erased. By enhancing these linkages, the negative impacts and legacy of the interstate’s construction can gradually be ameliorated.

### **WeHo Light Industrial Area**

As noted earlier, more physical definition should be given to the light industrial and distribution area along I-65, west of the WeHo mixed-use district. Here there are opportunities to utilize better landscape buffering along with signage to create more definition for the area. Designated truck parking areas should be screened and buffered from the surrounding neighborhoods. As the Fort

Negley park is established, such buffering will be important to help reduce the visual impact of truck parking and other industrial activity.

### **Browns Creek Greenway**

As noted elsewhere in this study, development of the greenway along Brown's Creek is encouraged as an approach for environmental mitigation and activation of this otherwise neglected and vacated area. Recreation amenities (e.g., play areas, interpretation of natural resources, etc) should be created as a resource for residents and workers not only in the study area but also in the neighboring Sudekum-Napier and Trevecca communities. Efforts should also be made to encourage facade and other upgrading to industrial businesses near the creek wherever possible.

### **Lafayette Street Corridor**

Nashville International Airport has integrated planning for a light rail station associated with a line to downtown along Murfreesboro Pike. The Mayor's Office has floated the concept of prioritizing this transit line because funding could be accessed from independent sources without the need for a public referendum.

### **Interstate 40 Ramp Re-Design**

There is a need to collaborate with State DOT on a re-design for the Interstate 40 off-ramp, which at present only allows egress from one direction. Enhanced access would help increase the marketability of the Lafayette Street corridor and all of the study area for a variety of uses, while also supporting traffic flow through both downtown/SoBro and the Fairgrounds area.

## **Incentives and Leveraging**

Incentives are needed in the study area to preserve and enhance affordability. The availability of affordable space in the central city is a primary driver for attracting, retaining, recruiting and supporting artisanal makers and small-batch manufacturers.

### **Create Creative District Designation**

A growing number of cities across Tennessee are exploring the creation of arts and cultural districts as a tool for encouraging the arts but also for the purposes of neighborhood revitalization, marketing, and economic development. Many states and cities across the country have long-established a variety of art, cultural and special district policies and programs. Tennessee is late to engage in this question, even though the state is rich in music and cultural heritage.

In 2008, this consultant had recommended creation of an “**Artisanal Business District**” in what is now known as WeHo. In 2016, RGDE recommended a cultural industry district for Music Row as a basis for establishing special incentives to accommodate the growth of the music industry while protecting special sites of cultural heritage and significance. A special cultural district had also been recommended by this consultant in 2008 for creating an “International Corridor” in Nolensville Pike. While informal arts districts like Buchanan Street (North Nashville) and 5<sup>th</sup> Avenue of the Arts (Downtown) have emerged throughout Nashville, none yet has a fiscal designation attached to public policy initiatives, economic development programs, and/or fiscal incentives.

A **business improvement district** (BID) or similar self-levy special district mechanism could be established in the district as a source of revenue for funding activities relating to small business retention, branding, business recruitment, urban design improvements (such as lighting and signage), and activities of Nashville Made, for example. BIDs are enabled by state legislation, although it is not clear whether a new BID could be authorized at this location given its proximity to the Downtown Nashville BID.

The National Endowment for the Arts’ (NEA) Our Town Program, along with the Kresge Foundation and Americans for the Arts, are among those providing funds specifically for creative place-making, planning and design projects in arts and cultural districts. The NEA matching grants range from \$25,000 to \$200,000. Such funds could be applied to project planning and design associated with the infrastructure improvements noted previously within the Chestnut Hill Artisanal Business District.

The district would collaborate with the Mayor’s Office, NashvilleMade, and the Nashville Chamber of Commerce to retain and recruit the targeted businesses identified earlier in this report for the study area. Funds generated through a BID or non-profit entity (e.g., Chestnut Hill Partnership, as discussed later in this section), could be used in part for the purposes of business assistance, marketing, and recruitment.

A cultural district designation for the WeHo and Chestnut Hill districts can help capture incentives (as discussed below) for small business retention and development, specifically focused on artisanal, craft (hand-made), and small batch manufacturing. By branding these districts as such, they would be differentiated from Music Row (a cultural “industries” district) and other potential arts or cultural districts in the city. A set of incentives would be captured and packaged within these special districts, including those already offered through federal, state, and local government. *Even when some of these incentives are available elsewhere and not designated specifically for the study area, they can be packaged as part of the overall branding and marketing of the area.*

## **Existing Incentives**

Existing incentives include the following available from federal, state and local governments as well as from the social enterprise recently established to assist local manufacturing companies.

- **Federal Government**
  - Opportunity Zones. The study area encompasses portions of two federal Opportunity Zones (GeoID#47037016000-Lafayette to Nolensville and GeoID#47037016100-Nolensville to I-65). Investors in Opportunity Zones and OZFs benefit from a deferral of tax, a step-up in basis, and a permanent exclusion of gain on appreciation. Ultimately, the incentives benefit neighborhoods like WeHo that would have seen investment “anyway,” since they are the most likely to see rapid gains in investment appreciation. This incentive is not necessarily targeted to small businesses and property investors, but to any investor within the opportunity zones.
  - NEA Our Town Grants. While not an “incentive” per se, the Our Town grants do provide funding for design and planning associated with the creation of an artisanal district in Chestnut Hill. Our Town also provides direct support for “Creative Business Development,” including “programs and services that support entrepreneurs and businesses in the creative industries, or help cultivate strong infrastructure for establishing and developing creative businesses.”
  - SBA Loan Programs. The federal Small Business Administration offers several loan programs targeting small businesses, including:
    - 7(a) Loan Guarantee Program (guarantee for loans of up to \$5.0 million for start-up and expansion)
    - MicroLoan Program offering up to \$50,000 for short-term purchasing
    - 504 Fixed-Asset Program, offering up to \$5.0 million in fixed-rate, long-term financing for business models that can show community benefits
  - SBA Grant Programs. The SBA also offers grants through its Small Business Innovation Research and Small Business Technology Transfer programs.
- **State Government**
  - INCITE: A program that provides start-up companies with access to capital for innovation.



- Jobs Tax Credit. The State provides relief from franchise and excise taxes through a \$4,500 credit per job created annually. The credits can be used to offset up to 50% of the company's tax liability.
- Manufacturing Incentives. Certain qualified businesses are not required to pay sales tax on qualified machinery and equipment. Manufacturers can also receive reductions in sales tax on utilities and can carry forward net operating losses for 15 years for tax purposes. Key incentives are summarized here, but it should be noted that few of these incentives are targeted or relevant to small businesses:
  - Tax Credits, including the \$4,500 standard job tax credit, enhanced job tax credit (for companies in Tier 1 or 3 Enhancement counties), super job tax credit (for large business investments), and the industrial machinery tax credit (up to 10% for purchase and repair of industrial machinery).
  - Sales Tax Exemptions, including those for industrial machinery and (reduced) utilities, personal property (reduced, for HQ), qualified equipment for distribution facilities, telecomm services, and hardware/software for data centers.
- **Metro Government**. Metro offers three distinct small business incentives, as well as incentives targeted to larger businesses. The latter, such as Tax Increment Financing (TIF) or PILOT programs, could also be applied to larger manufacturers in the study area. The following focuses on incentives for smaller producers.
  - Fast-Growing Business Employment Incentive. Provides eligible small businesses with a one-time \$500 per-job grant, with a maximum grant of \$50,000.
  - Property Investment Incentive. Provides grants of up to 50% of investment in new or rehabilitation improvements (up to a \$50,000 cap) for small commercial properties located in Tier 1 census tracts and valued at less than \$1.0 million.
  - Improvements to Historic Buildings in Commercial Use. Provides matching grants of up to \$50,000 (out of a total budget allocation of \$150,000) for exterior work on historic buildings within Tier 1 Census tracts.
- **NashvilleMade**. A social enterprise supported by the Arts & Business Council of Nashville and established with the help of the Mayor's Office to assist small manufacturing and maker businesses. Membership offers

exposure, networking opportunities, and access to a variety of resources including real estate services, financial resources, technical assistance, business planning, mentorship, legal support, accounting, educational workshops, etc.

### **Proposed Incentives**

Additional incentives are proposed that would apply specifically to cultural districts. Several of these incentives are typical of those offered in other states and cities around the country.

- **Property Tax Credits** for new construction or renovation of buildings that create work space for artists, makers and cultural activities. At present, Tennessee law does not enable tax credits except on housing for elderly and low-income residents. But Metro should be working with other cities and counties in the state to promote the development of State special district legislation for arts and cultural districts. Among those already pursuing such districts at the local level are Columbia, Memphis (South Main), Bristol, Knoxville (Gay Street), Chattanooga (Bluff View Arts District), and others. Some of these have enacted local regulatory incentives such as Columbia's Art District zoning overlay, but they lack the kinds of local and state fiscal or financial incentives ("carrots") found in arts and cultural districts elsewhere around the country. These communities span political boundaries across Tennessee and offer a rare opportunity for collaboration for promoting the state's enormous cultural resources for economic development.
- **Sales Tax Exemption on Local-Sourced Goods.** The State's manufacturing business incentives could be strengthened to incentivize local and in-state purchasing of goods and services, such as through exemptions or reductions in sales taxes paid on such items. Clearly, such an incentive would require statewide support, but it could be argued that such an incentive would be particularly useful in promoting small batch manufacturers and goods made within the study area, and therefore a logical incentive for targeting to small batch manufacturing and similar special districts.
- **Permit and Fee Exemptions.** Exemptions would be offered from, reduction in, or rebates for selected permits and fees for renovation and retrofitting of space as artist studios, maker spaces, and small batch manufacturing facilities. Exemptions or reductions could be applied to commercial construction permit fees, sign permit fees, plans examination fees, etc.
- **Business License Fee Incentive.** Give a 100% reduction in business licenses and occupancy permits for five years and permit fee relief.
- **Business License Tax Reduction,** for existing and new businesses.

- **Expedited (“Fast Track”)** building permit and codes reviews.
- **Capital Equipment Grants**, provided for qualified arts-related or craft and small-batch manufacturing businesses. This type of program could be an off-shoot of Metro’s existing Property Investment Incentive, targeted to arts and small business districts, or funded through Metro Government, or foundations and other non-General Fund sources. Funds might be made available for investment in production tools and equipment (ranging from pottery wheels to digital printers or cutting and pressing machinery), as well as artist supplies, interior fit-out, new technologies, or other operating capital. Grant preferences or levels could be tied to Nashville as a source of tools, machinery, equipment, and supplies.
- **Affordable Chestnut Hill Artisanal Business District Space**
  - Chestnut Hill Partnership. As indicated above, a BID and/or non-profit partnership would be formed with NashvilleMade, Fort Houston, and private property owners in Chestnut Hill to create dedicated space for maker “graduates” and second-tier companies moving up from “incubator” spaces like Fort Houston. Because of the dominance of a handful of families who own significant numbers of buildings in Chestnut Hill, there may be opportunities to work with them to establish the maker district in a way that guarantees their rental income stream (and eventual rent-to-own options) while protecting space from commercial redevelopment (resulting in “gentrification”). Density bonuses, as mentioned elsewhere in this report, could add value to the properties. But ultimately, a positive situation exists at present with the existing property owners preferring rental income over redevelopment. It is urgently recommended that this situation be “locked in” while the ownership structure is favorable, with the incentives noted in this section and provided to the property owners for upgrading and retrofitting their buildings to accommodate maker spaces; and for NashvilleMade, Fort Houston, Nashville CVB, and Metro Government providing guaranteed tenancy through an incubator graduate program and marketing/branding through public investments and a BID.
  - Commercial Affordability Small Business Fund. Facilitate creation of a private equity or grant-based fund to provide alternative financing opportunities for small property owners and small businesses. The fund would be managed by the small business division of the Nashville Chamber or a similar small business-focused public or private entity. The fund would provide low-cost loans, grants, and other financial assistance for property improvements or investment.<sup>4</sup>

---

<sup>4</sup> City of Seattle, Commercial Affordability Advisory Committee Recommendations Report (undated).

Monies in the fund might be collected and re-captured within the framework of a business improvement district in the study area. A similar concept oriented more as a community property trust was proposed by this consultant for the Music Row cultural industries district.

- Revolving Loan Funds could also be established in partnership with local banks like Pinnacle, that have already shown a willingness to support NashvilleMade and the local fashion and maker communities. The power of loan funds has been compromised by the margins offered against historically low interest rates. But the availability of financing could be expanded through loan guarantees and lower credit requirements.

### **Workforce Pipeline**

While workforce development was not the focus of this study, industrial businesses cannot grow and expand without a solid workforce to support them. The primary complaint among the region's industrial employers at present is the lack of available labor at all levels. Nashville State Community College has an important role to play by engaging with college-age students. But given the study area's proximity to large public housing and low-income communities in the Sudekum-Napier, and Chestnut Hill areas; there are opportunities for strong partnerships with Metro schools and local community development organizations to ensure that area youth are integrated into work readiness and training programs. There are also opportunities to develop partnerships between Metro Schools and local industrial businesses for creating strong apprenticeship and internship programs.

### **Business "Preservation"**

Business retention strategies are recommended for legacy businesses, small-batch makers, and other appropriate existing industrial and artisanal uses. These strategies are drawn from the various regulatory and incentive policies proposed elsewhere in this report.

## **Creative District Designation**

As noted above, the creative district designation can help capture incentives aimed at reducing the cost of business and increasing the supply of affordable work space for existing and prospective new businesses.

**Chestnut Hill Partnership.** The Chestnut Hill Partnership (introduced above) would work to assist targeted and qualified businesses – both existing and new – to secure affordable space in the district. The partnership would also engage with its partners and funders to provide technical assistance and other support.

## **Incentives and Leveraging**

The various incentives identified above would be applied to assist in business retention as well as business recruitment and development. As existing businesses wish to expand, capital equipment grants would be made available to assist with operating capital needs including purchase of machinery and equipment, artist supplies, technology, and other requirements. Reduced fees and expedited permitting can help those businesses wishing to expand their operations or fit out interior spaces.

## **Environmental Mitigation**

As noted earlier, public interventions should include implementation of a greenway project along Brown's Creek as recommended in the greenways master planning. The greenway project would go a long way toward increasing attention to environmental conditions along the creek, including clean up and maintenance. It is not recommended that Metro engage in buy-outs of active industrial or other business enterprises in the Browns Creek flood plain or floodway at this time. But, Metro should limit new industrial development or expansion within the flood plan and flood way where otherwise allowed by right.

As noted previously in this report, *no further development inconsistent with conservation policy from NashvilleNext should be developed within this (Browns Creek) district.* After current uses cease, areas within the floodplain and floodway should be rezoned with an SP that restricts uses significantly and complies with conservation efforts for environmentally sensitive features as described by the Community Character Manual.

## **Role of Key Parties in Implementation**

The role of Metro and State Government, public-private partnerships, non-profits, and new organizations in implementation of these strategies has been partly defined above and is summarized here.

## **Metro Government**

Metro has an important role to play from several fronts in strategic implementation. First, Metro's regulatory agencies including the Department of Planning would review and consider the appropriate changes and designations for zoning and land use within the study area as outlined in this report. Among these changes are an incremental evolution away from industrial use within the conservation areas along Brown's Creek, the integration of an SP in WeHo and the Chestnut Hill Business District encouraging more craft production and creative industries while restricting automotive sales & service, home improvement sales, liquor and general office. A clear policy boundary should be established between WeHo and the light industrial district to protect distribution and traditional manufacturing from commercial encroachment while also protecting residential and mixed-use neighborhoods from truck traffic.

Metro also has an ongoing role to play in both facilitation and implementation of certain infrastructure and capital improvements in the area, including initiating discussions with CSX on the modal interface and developing design concepts and implementing plans for urban design improvements in the Chestnut Hill Business District. Probably Metro's most important role will be to facilitate discussions and engage with property owners and potential partners like NashvilleMade, State Government, and the Chamber on establishment of a cultural industries district including certain incentives and marketing to balance any further restrictions on land use.

Metro Government and local partners should be working with other communities statewide on drafting special district legislation supporting the creation of arts & cultural districts, including those primarily oriented to small batch manufacturing and the "maker" community. The growing number of such communities in Tennessee is testament to the cross-political opportunities that exist for promoting this concept. When the City Council of a town like Columbia pro-actively passes legislation to create and incentivize an arts district (through creation of an overlay district and establishment of the Columbia Arts Council), then clearly there is support for efforts beyond Nashville to gain state incentives.

## **State Government**

As noted above, the State of Tennessee is losing ground to competing states and jurisdictions nationwide that have enacted statewide arts and cultural district programs and incentive packages. There is the opportunity to support the creative industries as a mechanism for driving economic development, to enhance tourism in small and large communities statewide, and to support small businesses including manufacturers who are the backbone of job creation. Strengthening and broadening the state's small business incentives such as through enhanced tax credits and exemptions, can help to promote entrepreneurship and job growth with minimal risk to State finances. Thus, it is incumbent upon the State to revisit its

small business development efforts and tie those efforts more pro-actively to special districts and industry clusters to achieve more targeted results.

### **NashvilleMade**

NashvilleMade has the opportunity to become a strong representative of the city's manufacturing and maker communities, to enhance networking, leverage business retention and recruitment, support labor force development, and promote the city's local products. Part of the strategy for NashvilleMade can be to focus on cluster development within key districts in the city. Experience shows that, when industries aggregate, they gain market exposure, cost efficiencies, specialized skills, and product diversification. NashvilleMade, in collaboration with private property owner and government as indicated in this report, can help focus attention on the city's manufacturing and maker districts, their needs and requirements for business. NashvilleMade can play an important role in communicating and branding these different areas for their product development and promotion. WeHO and the Chestnut Hill Business District provide opportunities for NashvilleMade to focus attention and resources where there will be greater returns on investment.

### **Chestnut Hill Partnership**

A public-private partnership is recommended in this report that would help to support the efforts for creating, supporting and retaining an affordable, small batch manufacturing district adjacent to downtown Nashville. As outlined above, the partnership would include the private property owners along with key businesses, government and NashvilleMade partners to secure a package of incentives while promoting regulatory restrictions, both of which are meant to protect the property owners' investments while promoting the affordability of the area for current and future small business growth. The partnership could take the form of a BID – business improvement district, supported by the property owners, or of a non-profit PPP that would gain support from partner organizations, business memberships and property owner participation. Key components of the partnership's efforts would be to brand and promote the area, seek grant and other funding for public infrastructure and building improvements, lobby for grants and other incentives, and recruit businesses to rental or rent-to-own building opportunities.

### **Nashville Area Chamber of Commerce, CVB, etc.**

The Chamber offers small business resources, but there is the opportunity to package more of these resources into incentives programs targeted to special districts like the Chestnut Hill Artisanal Business District. The Chamber and other organizations would work to support small business programs aimed at small manufacturers, including search assistance for filling affordable space needs within the district. As a special district oriented to makers and other small artisans

is established in Chestnut Hill, along with the WeHo district, there is the opportunity to promote the area as a walk-able attraction and extension of Downtown and SoBro for visitors and convention attendees. This will help provide exposure to (and a client base for) products and art produced in the area.