NOLENSVILLE PIKE *Market Analysis*



Volume 2A: Office & Industrial Market Findings Including an Existing Conditions Assessment

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INTRODUCTION

Section 1 of this Volume 2A Report provides a summary Economic Overview as context for the report. In Section 2, Existing Conditions (including a Site Analysis and Inventory) is summarized based on extensive field reconnaissance, interviews, data collection and analysis of assessment records. Section 3 provides an Industrial Market Analysis followed by the Office Market Analysis in Section 4. Residential and Retail market analyses are found in Sections 5 and 6, respectively, of the Volume 2B Report. Finally, Section 7 (also in Volume 2B) provides a brief summary of findings from the Opportunities Assessment for other uses. It should be noted that the market analyses and opportunities assessments provide the best possible forecasts given available information, but are subject to unforeseen changes in conditions.

Section 1. ECONOMIC OVERVIEW

This section provides a brief economic and demographic overview of southeast Nashville, citywide, and regional trends as context for the market analyses. The economic base is examined, particularly in terms of industry and employment trends, major employers, construction trends, and key drivers. Demographic trends and forecasts are also examined, in terms of population base, households, income, and other relevant indicators.

Economic Base and Employment

Economic base is examined in terms of at-place employment by industry.¹ Past trends are also assessed to provide an indication of overall change in the economy that may affect the markets for various types of real estate regionally and within the Nolensville Pike Corridor.

Background

Nashville is known as Music City, but music is not its largest industry. The city has prided itself on having a relatively diverse and healthy economy which has helped the Nashville region survive the "boom and bust" dislocations of other cities. The city's economy has at times been driven by key sectors including transportation (driven first by steamboats, then railroads, then highways and to some extent air travel). While Nashville is landlocked, its strategic location near the population center of the United States has helped it maintain its status as an important transportation node. The Louisville & Nashville and Nashville, Chattanooga, and St. Louis railroads were once powerful entities in Nashville before they were swallowed by major out-of-town corporations. Radnor Rail Yard, located in south Nashville near the study area, is still a major switching yard for freight rail. At the same time, Nashville is now the largest US city without Amtrak passenger rail service. The city does offer a competitive airport with good domestic service, but lacks extensive international service that would tie its economy more firmly to the global business network.

Nashville is the State Capital and therefore an important center for government and its attendant services. Because of the State's presence here, Nashville has more than its fair share of lawyers, lobbyists, associations, and contractors serving or working with government.

¹ At-place employment means jobs by location of establishment, as opposed to "resident employment" or jobs by location of worker residence.

Printing and publishing have also long played important roles in Nashville's economic base. Nashville earned the moniker "Protestant Vatican" partly because of the agglomeration of religious publishing houses headquartered here, along with religious institutions of higher learning. Nashville also earned the moniker "Athens of the South" because of its many universities and educational institutions, and the name was cemented with the development of the Parthenon replica as a symbol of the city. Institutions like Vanderbilt University, Fisk University, Meharry Medical College, Belmont University, Middle Tennessee State University and others all play a key role in creating a "brain trust" for the city and have become major drivers of local and regional economy.

The region has also had other dominant manufacturing industries at one time or another, including chemicals, auto glass, and most recently automobiles. With the recent relocation of Nissan America's headquarters to the region, Nashville has solidified its position in the automotive corridor that extends south from Detroit. The city has also pro-actively attracted other corporate relocations and has become the envy of economic development professionals elsewhere.

However, Nashville has long been known as a corporate location. A cluster of banking, brokerage houses, and insurance companies in Nashville earned the city another nickname, "Wall Street of the South," especially during the 1920s when the city's financial institutions became regional players. Interstate banking legislation effectively ended the city's regional dominance in this arena as the very profitable local banks were bought by national suitors.

Today, Nashville is a corporate leader in the private healthcare industry, home to the headquarters of the world's largest private hospital company and a number of other healthcare and support companies (such as financial and insurance services relating to healthcare). Despite Nashville's dominance on the management and financial side of the healthcare industry, the city may not have developed its full potential for research and development. The city has strong medical institutions, a proposed medical mart, and strong corporate healthcare presence. Yet the city lacks a concentrated location for development of new scientific products, such as in an R&D or Science & Technology park. Further, despite the presence of Dell and other technology companies, Nashville is not yet known as a major innovation hub in the technology sectors.

The music industry, which can be considered the product of Nashville's publishing and insurance industries, with the National Life & Accident Company's radio station WSM ("We Shield Millions") being the initial venue for the Nashville Sound on America's airwaves. Opryland helped put Nashville firmly on the tourism industry map and the city is now embarking on development of a world-class convention center. Today, Nashville has a diversified services-based economy that is highly entrepreneur-driven.

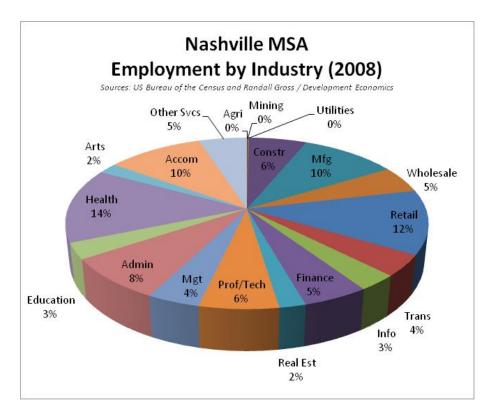
Nashville MSA

The Nashville Metropolitan Statistical Area (MSA) includes a 13-county region comprised of Davidson, Sumner, Robertson, Rutherford, Williamson, Cheatham, Dickson, Wilson, Trousdale, Smith, Macon, Cannon and Hickman counties.



Map Source: Metro Nashville Planning

The MSA, like the city itself, is characterized as having a relatively healthy and diverse economy. As the chart below illustrates, no single economic sector captures more than 14% of the region's private employment.



The health sector is largest among private employers, accounting for 14% of the region's employment base. This sector includes the area's many hospitals as well as medical offices and others working in health and medicine. It does not,

however, include the corporate offices of healthcare companies, which are included in the Management Services sector.

The relatively low-wage retail sector accounted for 12% of the privatesector jobs in the region. This industry is driven by household and income growth within the local market. Despite decades of decline, manufacturing employment still accounted for 10% of the region's jobs and is the area's third largest private sector. Accommodation and foodservice also held about 10% of jobs, reflecting in part the importance of Nashville's tourism industry. Administrative services (e.g., waste management, etc) accounted for 8% of employment, followed by construction (6%) and professional/technical services (also 6%). Finance (for which Nashville has traditionally been a leader) accounted for only 5% of employment along with wholesale trade and "other" services. Transportation held 4% of the region's jobs, followed by education, information, real estate, and arts & recreation. Less than 1% of the region's employment is now in agriculture, mining, or utilities. Given that Nashville's 13-county MSA includes many productive agricultural areas, the low agricultural employment is telling of how the agricultural sector and the region's economy have evolved.

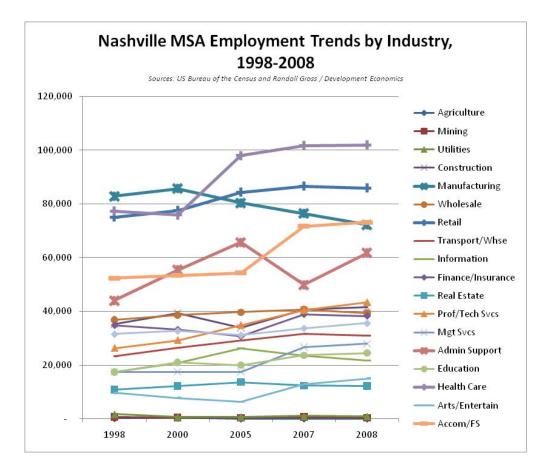
Employment Trends. At-place employment trends were analyzed for the MSA between 1998 and 2008. The latest available consistent data suggest that the MSA had a total employment base of 726,700 in 2008, an increase of about 116,700 or 18.7% since 1998. The fastest growth was in the professional and technical services sector, which expanded by 64.9% and added over 17,000 jobs.

The largest number of jobs was created in the health care sector, with almost 102,000 added over ten years. This job growth is not unique to Nashville as an expansion of healthcare nationwide responds to the use of new technologies and to extended life spans. Other key growth industries in the region have included management services (e.g., corporate offices), administrative support, accommodation and foodservice, arts & entertainment, education, information, transportation & warehousing (especially distribution), retail, and construction.

Other sectors have declined, including agriculture (down by 57% or 100 jobs), mining (down by 50% or 375 jobs), and manufacturing (down by 12.7% or 10,500 jobs). The decrease in these sectors mirrors national trends, where new technologies and/or foreign competition have reduced the need for labor among America's producers. There are now less than 1,000 workers in each of the region's agriculture, mining, and utilities sectors. The fact that only 75 people are employed full-time in agriculture in this 13-county region is unfortunate, and there is a need to examine opportunities for agricultural development in the region particularly with global movements back to local-source product. Employment trends are summarized below.

Table 1.	AT-PLACE EMPLOYMENT TRENDS, NASHVILLE MSA, 1998-2008
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						1998-200	8 Change
Industry	1998	2000	2005	2007	2008	Number	Percent
Agriculture	175	375	60	100	75	-100	-57.00%
Mining	750	528	375	750	375	-375	-50.00%
Utilities	1,750	750	750	1,079	983	-767	-43.80%
Construction	35,160	39,272	33,903	40,579	41,469	6,309	17.90%
Manufacturing	82,767	85,677	80,336	76,401	72,251	-10,516	-12.70%
Wholesale	36,777	38,674	39,669	40,751	39,305	2,528	6.90%
Retail	75,080	77,558	84,318	86,566	85,910	10,830	14.40%
Transport/Warehouse	23,204	26,473	29,203	31,678	31,010	7,806	33.60%
Information	17,500	20,786	26,151	23,398	21,665	4,166	23.80%
Finance/Insurance	34,779	33,199	30,691	38,823	38,228	3,449	9.90%
Real Estate	10,911	12,202	13,646	12,333	12,149	1,238	11.30%
Prof/Tech Services	26,305	29,231	34,880	40,392	43,386	17,081	64.90%
Mgt Services	17,500	17,500	17,500	26,729	27,911	10,412	59.50%
Admin Support	44,006	55,349	65,616	49,860	61,744	17,738	40.30%
Education	17,478	21,016	20,000	23,627	24,493	7,015	40.10%
Health Care	77,332	75,768	97,970	101,623	101,940	24,608	31.80%
Arts/Entertainment	9,655	7,785	6,277	12,985	15,001	5,346	55.40%
Accommodation/FS	52,373	53,304	54,252	71,625	73,132	20,759	39.60%
Other Services	31,526	32,721	31,190	33,735	35,580	4,054	12.90%
Unclassified/Aux.	17,874	8,000	60	43	89	N/A	N/A
TOTAL 1/	612,035	635,823	666,580	712,907	726,697	114,662	18.70%
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Notes:	Numbers i	n Italic are e	stimates ba	sed on Cens	sus averages	S.	
	1/ Actual C	Census totals	s (which do i	not necessa	rily represen	it the total	
	of column	numbers/es	timates.				
Sources	U.S. Burea	au of the Ce	nsus and Ra	andall Gross	/ Developm	ent Economi	CS.



Top Employers. The mix of large employers provides another indication of the key drivers in the regional economy. A sample of large employers is provided below along with their location and employment. The list excludes local government and schools systems.

Location	Type/NAICS	Jobs
Nashville Nashville Franklin Nashville Lavergne Nashville Lavergne Nashville Columbia Smyrna Brentwood Nashville	Accom/Radio/721110 Hospitals/622110 Wholesale Books/424920 Books/Publishing/451211 Hospital/622110 Building Mtnc/561720 Home Health/621610 Telecomm/517911	3,622 2,900 2,048 2,000 2,000 1,900 1,891 1,700
Franklin	Auto Loans/522291	1,700
	Nashville Nashville Franklin Nashville Lavergne Nashville Lavergne Nashville Columbia Smyrna Brentwood	NashvilleUniv., Hospital/622110NashvilleState GovernmentNashvilleHospitals/622110FranklinAutomobilesNashvilleHospital/622110LavergneTire Manufacturer/441320NashvilleAccom/Radio/721110NashvilleHospitals/622110LavergneWholesale Books/424920NashvilleBooks/Publishing/451211ColumbiaHospital/622110SmyrnaBuilding Mtnc/561720BrentwoodHome Health/621610NashvilleTelecomm/517911

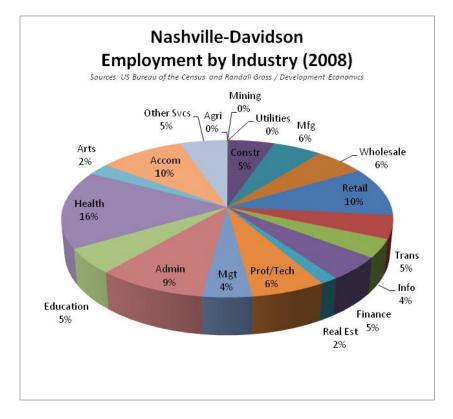
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Psychiatric Solutions Aim Healthcare Services General Motors National Nephrology Assoc. United Parcel Service AGC Life Insurance Co. Correct Care Solutions, LLC. Bellsouth Corporation Comdata Network State Farm Fire & Casualty Asurion Corporation SunTrust Banks Gannett Co, Inc. Paccar, Inc. Williamson County Hospital Adventist Healthcare System Summit Medical Center American General Deloitte & Touche Food Lion, LLC Gap, Inc. Haven Behavioral Healthcare Jones Brothers, Inc.	Franklin Nashville Spring Hill Nashville Nashville Nashville Nashville Brentwood Murf'boro Nashville Nashville Nashville Madison Franklin Madison Hermitage Nashville Hermitage Nashville Gallatin Franklin Mt. Juliet	Psychiatric Hosp/621112 Data Mgt Svcs/561110 Auto Mfg/336111 Business Cons/541618 Parcel Delivery/492210 Insurance Carrier/524113 Med Dispensary/621111 Telecomm/541690 Data Processing/518210 Insurance Carr/524126 Auto Owner Asn/811198 Comm Bank/522110 Publishing/511110 Truck Mfg/333924 Hospital/622110 Hospital/622110 Insurance Carrier/524113 Accounting/541219 Supermarkets/45110 Warehousing/493190 Psychiatrist/621112 Construction/237310	1,680 1,500 1,500 1,500 1,500 1,200 1,200 1,200 1,200 1,200 1,200 1,100 1,100 1,100 1,000 1,000 1,000 1,000 1,000 1,000
Jones Brothers, Inc. Middle Tenn. Med Center	Mt. Juliet Murf'boro	Construction/237310 Hospital/621110	1,000 1,000
Tom James of New Orleans	Franklin	Retail Stores/448110	1,000

Additional companies with over 500 employees are listed in the Appendix of this report.

Nashville-Davidson

The regional economy very much mirrors that of its core city, Nashville, indicating that the central city is still the region's primary economic engine. The city's economic base is also relatively diverse, although it is less evenly distributed than in the region as a whole. Nashville has concentrations in healthcare (16%), accommodation & foodservice (10%), retail (10%), administrative service (9%), professional/technical (6%), manufacturing (6%), and wholesale trade (6%). Transportation, education, finance, construction, and "other" services each have 5% of the employment base. Again, the city has relatively few workers in agriculture, mining, or utilities.



Employment Trends. Nashville had an employment base of 415,900 in 2008, up by 22,800 or 5.8% since 1998. Positive growth in the urban employment base bodes well for the local economy, even as the region and the nation have experienced a sharp economic downturn since 2008. Ultimately, Nashville started the recession from a position of strength. Growth has been concentrated however, in certain sectors. Health care generated more than 15,000 jobs since 1998, again mirroring national and regional trends. Administrative support employment grew by 38.7% with the addition of more than 10,700 jobs. Professional and technical services also increased employment adding about 7,500 or 40%. Other growth was seen in arts & entertainment (the fastest growing, with 3,000 jobs or 41%), accommodation, education, transportation, and management services.

Meanwhile, the city saw a contraction (even before the recent recession) in manufacturing (down by 7,200 jobs or 23.8%), as well as agriculture, mining, wholesale, retail, information, finance & insurance, and real estate, The loss in several of Nashville's historic core industries (e.g., finance and insurance, retail) is somewhat disturbing, especially given the growth in households during this period. Some of these trends indicate "leakage" of businesses from Nashville to the suburban counties.

Table 2.

AT-PLACE EMPLOYMENT TRENDS, NASHVILLE-DAVIDSON, 1998-2008

						1998-200)8 Change
Industry	1998	2000	2005	2007	2008	Number	Percent
Agriculture	81	10	-	-	10	-72	-88.30%
Mining	274	228	128	175	175	-100	-36.30%
Utilities	375	375	349	349	375	-	0.00%
Construction	20,784	23,108	17,358	20,918	21,446	662	3.20%
Manufacturing	30,149	31,538	25,033	24,542	22,984	-7,165	-23.80%
Wholesale	26,758	26,925	21,179	25,680	23,646	-3,112	-11.60%
Retail	44,853	44,038	43,868	43,205	41,897	-2,956	-6.60%
Transport/Whls	18,187	21,651	19,685	20,076	19,989	1,802	9.90%
Information	16,049	16,712	19,106	16,452	15,793	-256	-1.60%
Finance/Insurance	23,224	20,987	21,590	20,552	20,185	-3,039	-13.10%
Real Estate	7,268	7,757	6,861	6,918	6,400	-868	-11.90%
Prof/Tech Services	18,714	19,217	21,470	24,652	26,181	7,467	39.90%
Mgt Services	16,235	12,862	13,219	19,397	17,502	1,267	7.80%
Admin Support	27,876	34,935	27,656	29,006	38,651	10,775	38.70%
Education	15,840	19,325	17,238	20,966	21,441	5,601	35.40%
Health Care	51,825	50,997	65,702	67,267	66,861	15,036	29.00%
Arts/Entertainment	7,215	5,604	7,155	8,115	10,184	2,969	41.20%
Accommodation/FS	35,778	34,939	35,066	39,042	40,057	4,279	12.00%
Other Services	21,414	21,462	19,111	20,355	22,187	773	3.60%
Unclassified/Aux.	10,198	5,473	50	28	59	N/A	N/A
TOTAL 1/	393,097	398,547	381,824	407,671	415,862	22,766	5.80%
Notes:	1/ Actual C		s (which do		sus average: rily represer		

Sources U.S. Bureau of the Census and Randall Gross / Development Economics.

Share of Regional Economic Base. Nashville's role in the regional economy was analyzed in order to determine where the city has certain agglomerations that may relate to a competitive advantage. Overall, Nashville has 57% of the region's private employment base, down from 64% in 1998. This suggests that the regional economy is becoming less concentrated in Nashville, which is not surprising as the city's suburbs sprawl into neighboring counties. There are only two sectors where Nashville's share has increased during the past ten years, namely mining and utilities, but the employment base in these two sectors is so small as to be negligible in the broader economy. Further, the city's

Table 3.

employment in those sectors has declined so that the city is only capturing a larger share of a smaller overall base.

NASHVILLE SHARE OF REGIONAL

Table 3.	EMPLOYMENT BY INDUSTRY, 1998-2008								
			1998-2008 C	Change					
Industry	1998	2008	Number	Percent					
Agriculture	46%	13%	(0.33)	-71%					
Mining	37%	47%	0.10	28%					
Utilities	21%	38%	0.17	78%					
Construction	59%	52%	(0.07)	-13%					
Manufacturing	36%	32%	(0.05)	-13%					
Wholesale	73%	60%	(0.13)	-17%					
Retail	60%	49%	(0.11)	-18%					
Transport/Whse	78%	64%	(0.14)	-18%					
Information	92%	73%	(0.19)	-21%					
Finance/Insurance	67%	53%	(0.14)	-21%					
Real Estate	67%	53%	(0.14)	-21%					
Prof/Tech Services	71%	60%	(0.11)	-15%					
Mgt Services	93%	63%	(0.30)	-32%					
Admin Support	63%	63%	(0.01)	-1%					
Education	91%	88%	(0.03)	-3%					
Health Care	67%	66%	(0.01)	-2%					
Arts/Entertainment	75%	68%	(0.07)	-9%					
Accommodation/FS	68%	55%	(0.14)	-20%					
Other Services	68%	62%	(0.06)	-8%					
Unclassified/Aux.	57%	66%	0.09	16%					
TOTAL 1/	64%	57%	(0.07)	-11%					
Sources:	U.S. Bu	ureau of th	e Census and						
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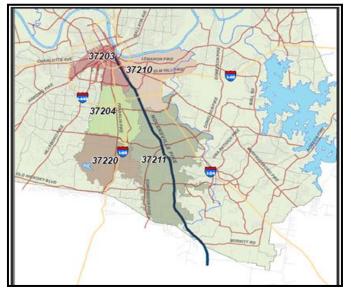
Randall Gross / Development Economics.

Where Nashville has substantial share of the regional base is in education services (88%, not surprising with a major private institution like Vanderbilt University), followed by information services (73%, i.e., telecommunications), arts & entertainment (68%), health care (66%), transportation & warehousing (64%), management services (63%), and administrative support (63%). The city has a relatively low share of agriculture (13%), manufacturing (32%), and utilities (38%). Other than in agriculture, Nashville's share of regional employment fell steepest in management services (from 93% to 63%) and also in information, finance, real estate and accommodation. The city has performed best vis-à-vis

Randall Gross / Development Economics

the region in administrative support, health care, education, arts & entertainment, and "other" services.

Southeast Nashville



Employment trends were also examined based on the best available data for southeast Nashville, where the study area is located. This information was collected and analyzed for eight zip-code basis in southeast Nashville. The study area forms part of four zip codes, 37203 (Wedgewood/West End), 37210 (Woodbine), 37211 (Glencliff/Radnor), and 37204 (Berry Hill). Surrounding areas included are also in the following data.

Map Source: Metro Nashville Planning

			1998-2008	8 Change
Zip Code	1998	2008	Number	Percent
37203	61,662	51,104	(10,558)	-17.1%
37210	33,519	26,790	(6,729)	-20.1%
37204	13,017	16,785	3,768	28.9%
37211	29,284	38,136	8,852	30.2%
37013	12,066	11,568	(498)	-4.1%
37220	1,445	1,489	44	3.0%
37027	34,596	42,310	7,714	22.3%
37135	528	836	308	58.3%
TOTAL	186,117	189,018	2,901	1.6%
Sources:	US Bureau of the	Census and Ran	dall Gross /	

Table 4. EMPLOYMENT TRENDS, SOUTH/EAST NASHVILLE CORRIDOR, 1998-2008

Development Economics.

Employment within this area increased between 1998 and 2008 by about 2,900 or 1.6%. This rate of growth falls short the citywide and regional average but is still positive. Most of the area gained jobs but substantial employment was lost in zip code 37203, according to the Census data. This area includes the corridor located north of I-440, west of 12th Avenue, and east of Charlotte Pike. At-place employment fell within this zip code by nearly 10,600 or 17.1%,

Randall Gross / Development Economics

according to the Census. However, the rate of decline was higher in 37210, which includes the corridor in Woodbine east past I-40 to the Cumberland River. Thus, the areas surrounding south and east portions of the inner city lost employment most dramatically during this period. Meanwhile, employment in 37211 (Glencliff), which includes most of the Nolensville corridor from Wedgewood south to Old Hickory Boulevard, increased during this same period by 8,800 or 30.2%. Since the corridor forms one of the major employment nodes within 37211, the employment growth in this zip code is a positive sign that the area remains prosperous. Employment also increased dramatically in 37204, which lies to the west of the study area and includes the intersection of I-65 and I-440. This area gained more than 3,700 jobs. Finally, the growing Brentwood area (37027) not surprisingly gained significant employment of about 7,700 or 22.3% during this period.

Housing Construction Trends

Housing construction is an important indicator of demographic growth. Nashville saw construction of 61,910 housing units between 1990 and 2009, for an annual average of about 3,100.

Year	Single Family	Duplex	3-4 Family	Multi- Family	Total
1990	1,289	64	-	335	1,688
1991	1,305	36	-	148	1,489
1992	1,861	18	85	66	2,030
1993	2,111	20	57	256	2,444
1994	1,445	38	8	688	2,179
1995	179	2	4	140	325
1996	2,160	102	4	2,617	4,883
1997	1,208	22	3	479	1,712
1998	2,455	196	7	677	3,335
1999	1,896	24	-	974	2,894
2000	2,376	86	40	585	3,087
2001	3,005	50	4	493	3,552
2002	2,874	140	-	448	3,462
2003	3,192	62	24	1,035	4,313
2004	3,630	350	4	824	4,808
2005	3,818	220	-	981	5,019
2006	4,089	216	4	819	5,128
2007	3,253	80	12	2,198	5,543
2008	1,548	28	-	791	2,367
2009	1,111	8	3	530	1,652
Total	44,805	1,762	259	15,084	61,910
Average	2,240	88	13	754	3,096
1990-99	1,591	52	17	638	2,298
2000-09	2,890	124	9	870	3,893

Table 5. HOUSING CONSTRUCTION PERMIT TRENDS, NASHVILLE-DAVIDSON, 1990-2009

Sources: US Bureau of the Census and Randall Gross / Development Economics.

Of this average were 2,240 single-family units, 750 multi-family units, and about 100 2-3-4 unit dwellings. However, between 2000 and 2009, housing construction was significantly higher on average (at 3,900 units per year) than during the previous ten years (at 2,300 per year).

Demographics

Demographic trends and forecasts were analyzed for Nashville and the MSA between 1990 and 2010 in terms of population, households, and income. During this period, both Nashville and the broader region experienced substantial population and household growth. Nashville's population increased by 24.0% (to 605,700), while the region's increased by 52.3% (a gain of nearly 550,000 to nearly 1.6 million). When including neighboring Census-designated "micropolitan" areas, the region's population expanded even higher.

Table 6. DEMOGRAPHIC TRENDS, NASHVILLE AND MSA, 1990-2010

								1990-2010) Change
Factor/Area		1990		2000		2010	Number	Percent	Annual
Denviation									
Population									
Nashville-Dav.		488,364		545,524		605,658	117,294	24.0%	1.2%
MSA	1	,048,218	1	,311,789	1	,596,033	547,815	52.3%	2.6%
Households									
Nashville-Dav.		198,581		227,403		252,508	53,927	27.2%	1.4%
MSA		399,566		510,222		624,143	224,577	56.2%	2.8%
Med HH Income									
Nashville-Dav.	\$	49,693	\$	51,917	\$	47,040	(\$2,653)	-5.3%	-0.3%
MSA	\$	52,405	\$	57,375	\$	52,798	393	0.8%	0.04%

Note: Median Household (HH) Income stated in constant dollars, adjusted for inflation.

Sources:

US Bureau of the Census and Randall Gross / Development Economics.

The number of households also increased during this period, driving demand for housing. Nashville added nearly 54,000 households or 27.2% while the MSA added 225,000 (56.2%). Household growth rates exceeded those for population growth due to the continued decrease in average household size. Smaller family size further increases demand for housing.

Household incomes increased in real dollars (after adjusting for inflation) between 1990 and 2000, with Nashville's households seeing an increase of 4.5% and those in the MSA experiencing a 9.5% increase. However, there has been a

reversal of fortune for area households since 2000, with a constant dollar decrease of 9.4% in Nashville-Davidson County and only a 0.7% increase in the MSA as a whole. Over the 20-year period, Nashville incomes fell by 5.3% and MSA households' increased by 0.8% in real dollars. Some of this income stagnation occurred during the past two years during a global economic slump. However, incomes in Nashville and many other cities had been declining in real terms since 2000 or 2001. It had taken several years since the 2002 recession for incomes to start increasing before the recent recession again pushed them down.

Hispanic Population

Table 7.

Hispanic population trends were examined because of the substantial Latino population base within southeast Nashville and growth throughout the area.

HISPANIC POPULATION TRENDS, NASHVILLE

		OLAHON INE		
	MSA, 2000-201	0		
			2000-2010) Change
Factor	2000	2010	Number	Percent
Deputation	1 011 700	1 506 022	204 244	04 70/
Population	1,311,789	1,596,033	284,244	21.7%
Hispanic	41,177	92,224	51,047	124.0%
Share of Total	3.1%	5.8%	0.03	84.1%
Country of Origin				
Cuba	1,223	2,390	1,167	95.4%
Mexico	25,927	59,952	34,025	131.2%
Puerto Rico	3,020	4,845	1,825	60.4%
Other	11,007	25,037	14,030	127.5%
Note:	By 2010, Spani	sh was the prima	iry language s	spoken
	at home by an e	estimated 69,570	households.	
Sources:	US Bureau of t	he Census; Clari	tas, Inc.; and	
	Randall Gross	/ Development E	conomics.	

Between 2000 and 2010, the Nashville MSA gained an estimated 51,000 self-proclaimed Hispanics for a growth rate of 124%, as compared with a total population growth rate of 22%. The share of regional population who are Hispanic increased from 3.1% to nearly 6.0% during this ten-year period. Many of the area's Hispanics originated, not surprisingly, in Mexico, which accounted for about 65% of the total. Trends within Nashville-Davidson specifically are summarized below.

Table 9

l able 8.	HISPANIC POP	ULATION TREE	NDS, NASHV	ILLE-	
	DAVIDSON, 200	0-2010			
			2000-2010) Change	
Factor	2000	2010	Number	Percent	
Population	545,524	605,658	60,134	11.0%	
Hispanic	25,774	51,813	26,039	101.0%	
Share of Total	4.7%	8.6%	0.04	81.1%	
Country of Origin					
Cuba	796	1,554	758	95.2%	
Mexico	16,079	33,536	17,457	108.6%	
Puerto Rico	1,873	2,311	438	23.4%	
Other	7,026	14,412	7,386	105.1%	
Sources:	US Bureau of th	e Census; Clari	itas, Inc.; and		
	Randall Gross /	Development E	conomics.		

LISPANIC DODULATION TRENDS NASHVILLE

Within Nashville-Davidson, the Hispanic population totaled an estimated 52,000 in 2010, up by 26,000 or 101% since 2000. This compares with the citywide population growth rate of 11%. Hispanics comprised nearly 9.0% of Nashville's population in 2010, as compared with 4.7% in 2000. Nashville accounted for about 56% of the MSA's Hispanic population. Such growth, concentrated in the city (specifically within southeast Nashville), indicates the emergence of an important market in the region and in the city especially. This population base is explored further as part of the more detailed market analyses.

Forecasts

The regional and local demographic base is expected to continue expanding through 2020, but at a much slower pace than during the past 20 years. Nashville's population is expected to increase by about 33,000 or 5.4% by 2020, while the MSA will expand by 20.0% to 1.9 million. Households are expected to increase by 9.1% in Nashville and 23.9% region-wide although there are indications that household size is stabilizing and even growing in some areas.

									2010-202	0 Change
Factor/Area		2010		2015		2020	Ν	umber	Percent	Annua
Population										
Nashville	(605,658		618,509		638,655		32,997	5.4%	0.3%
MSA	1,	596,033	1,	727,736	1,	915,813	3	19,780	20.0%	1.0%
Households										
Nashville	2	252,508	:	263,135		275,384		22,876	9.1%	0.5%
MSA	(624,143		677,226		773,260	1	49,117	23.9%	1.2%
Med HH Income										
Nashville	\$	47,040	\$	49,494	\$	49,623	\$	2,583	5.5%	0.3%
MSA	\$	52,798	\$	56,439	\$	57,217	\$	4,419	8.4%	0.42%
Sources:	US B	ureau of t	the C	Census' C	larita	as, Inc.; N	ash	ville Are	a Metropo	olitan
	Planr	ning Org.	(MP	O); and R	and	all Gross /	' De	velopme	ent Econo	mics.

Table 9. DEMOGRAPHIC FORECASTS, NASHVILLE AND MSA, 2010-2020

Median Household Incomes are expected to increase modestly during the next 10 to 20 years at an average annual rate of 0.3% in Nashville and 0.4% or more in the region as a whole.

Summary

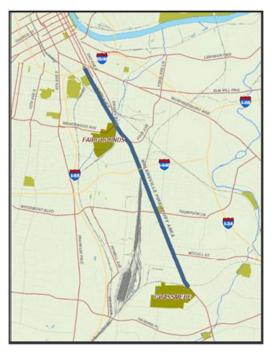
Nashville and the region have a growing, diversified economy that has evolved and changed over time. Nashville's economic diversification has not necessarily shielded it from global economic recessions, but the city does seem more resilient from economic shocks. The region's economic base is driven by education, government, manufacturing, and health care. Manufacturing continue to shed workers, consistent with national patterns, while health care grows with an aging population. The city has been successful in attracting corporate jobs and in retaining its claim as an arts and entertainment capital. A growing Hispanic population has helped the city retain a share of the region's population base although projections indicate slower growth in the future. If Nashville is to continue to expand its economy, there will be a need to expand its "fair share" of the research and technology innovation that will feed future economic growth.

Section 2. EXISTING CONDITIONS & SITE ASSESSMENT

A site assessment was conducted to examine existing conditions within the study area and surrounding portions of southeast Nashville. The purpose is to assess location and physical conditions and their impact on the general marketability of the corridor for various uses. Discussed here are findings with respect to location in the regional context, the basic inventory of uses within the study area, surrounding uses, physical conditions, and general business performance. The site assessment is based on review of existing documentation, extensive field reconnaissance, interviews with businesses and property owners, and development of an inventory database assisted by assessment records.

Location & Context

The Nolensville Pike Corridor study area is located in southeast Nashville along Nolensville Pike (US 31/41, TN11). Nolensville Pike is the extension of 4th Avenue South from downtown Nashville to Nolensville, in Williamson County. The study area (highlighted in red below) consists only of that area of 4th Avenue and Nolensville Pike between the I-65 Inner Loop (formerly I-265) and the railroad overpass at Grassmere adjacent the Nashville Zoo. A more detailed map of the area is provided (although the study area only extends between the Inner Loop and Grassmere).



The study area was also considered in the broader context of the entire length of Nolensville Pike from downtown Nashville to the town of Nolensville. Since the commercial character of the road remains similar in many respects beyond Grassmere, the study area must be placed in the broader market context.

Map Source: Metro Nashville Planning

Nolensville Pike is one of about 22 "spokes" that emanate in all directions from the core of Nashville and constitute the city's primary commuter routes. These routes include six legs of the Interstate Highway system, namely I-65 N/S, I-24 E/W, and I-40 E/W. Other Nashville "pikes" include Charlotte Pike, Dickerson Pike,

Hillsboro Pike, Harding Pike, Lebanon Pike, Gallatin Pike, Clarksville Pike, Whites Creek Pike, and others. Nashvillians' extensive use of the term "pike" for turnpike remains somewhat unique, although these same streets are also sometimes called roads or avenues. Nolensville Pike is one of two primary commercial corridors extending through southeast Nashville and beyond, one of the most densely-populated portions of the city and the metropolitan area.²

The other main southeast commercial corridor is Murfreesboro Pike, which shares many of the same characteristics of Nolensville Road including a similar market base. Nashville's urban growth has been focused in several primary urban corridors with the expansion of key suburban nodes. Among the most densely-developed urban corridors are south (I-65/Franklin Pike/Granny White Pike/Hillsboro Pike) through Brentwood, Franklin/Cool Sprinas. Spring Hill and Columbia. Another major corridor extends north-east (I-65/Gallatin Pike) through



Map Source: Metro Nashville Planning

Madison, Goodlettsville, Hendersonville, and Gallatin. A third, less denselypopulated urban corridor extends east (I-40/Lebanon Pike) through Donelson, Mount Juliet, and Lebanon. This latter corridor has been reinforced by the extension of commuter rail through Nashville Star. However, the most denselydeveloped corridor is southeast (I-24/Nolensville Pike/Murfreesboro Pike) through Antioch, Lavergne, Smyrna, and Murfreesboro. This urban corridor has also experienced some of the most dramatic growth, with Murfreesboro approaching the population of Nashville in the 1960s.

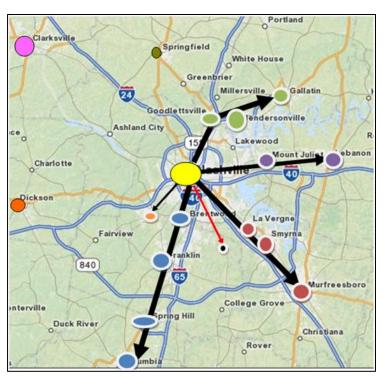
As shown above, Nolensville Pike is situated between two of the most developed and fastest-growing urban corridors in the region, south and southeast. As such, it is extremely well-situated to take advantage of a large and growing market base.

² Map at top sourced from Metro Planning. Map at bottom source: Randall Gross / Dev. Economics.

Access and Exposure

The study area portion of Nolensville Pike is located within a strong network of highways (including I-65 Inner Loop, I-65S, I-24E, I-440, and Thompson Lane/Briley Parkway), providing access throughout the region and nationwide. Downtown is located on the doorstep of the northern end of the study area. Brentwood is located ten minutes away from some parts of the study area. The Nashville International Airport is located just on the other side of I-24 from the study area and is also only minutes away. Large portions of the study area developed for industrial use largely because of the presence of the railroads which criss-cross the area and tie together at nearby Radnor Yards, a major regional switching yard now operated by CSX.

Given its location near trucking, major rail shipping, airport, primary business nodes. and commuter driving routes, the study area is among the most accessible in the region. That being said, the area does lack access to rapid transit as there is no commuter rail or rapid transportation through the area, despite the relatively high densities in the southeast urban corridor. Public transportation is provided by the Metropolitan Transit Authority bus system, which does provide regular service.



Traffic and Exposure

Many urban highways gradually lose traffic and market share due to competition from the Interstate highway system, which drains commuter and pass-through traffic off of older commuter routes. While this has happened to Nolensville Pike, the road still maintains strong traffic counts and provides exposure to thousands of commuters each day. Average Daily Traffic (ADT) is relatively low along 4th Avenue South, but gradually increases to a peak of nearly 75,000 at Harding Place.

Nolensville Road traffic "splits" into one-way 4th Avenue South (southbound) and 2nd Avenue South (northbound) near Carney Street and Ensley Boulevard. Traffic counts average only about 7,500 on 4th Avenue southbound near Carney Street (with another 7,700 northbound on 2nd Avenue). The 4th/2nd avenue "split" doesn't seem to cause serious traffic issues but it does cut in half the traffic exposure gained by any commercial businesses along this stretch and is problematic for residents walking along these streets, especially 2nd Avenue South (which is primarily residential). Traffic counts increase southward through the State Fairgrounds and nearby industrial areas to 23,000 near Craighead Avenue. Past I-440, traffic rapidly increases to 60,000 by the time Nolensville Pike reaches Thompson Lane. Thus, Nolensville Pike is emptying substantial traffic onto/off of I-440 from the south.

Traffic counts at the intersection of Nolensville Pike and Thompson Lane, in the center of the study area, are among the highest in Metro Nashville, at nearly 60,000 ADT (average daily traffic). In fact, the highest intersection traffic counts in the city (73,190 ADT) are generated just down the road at Nolensville Pike and Harding Place. In fact, four of the city's top 20 intersections (in terms of traffic volumes) are in the Nolensville Pike Corridor. This is important because the traffic along Nolensville Pike (even outside of the study area) represents part of the potential market for goods and services within the study area. The 2007 Nolensville Pike numbers³ are as follows:

•	Nolensville Pike at Harding Place	73,190 ADT
٠	Nolensville Pike at Old Hickory Boulevard	65,350
٠	Nolensville Pike at Thompson Lane	59,610
•	Nolensville Pike at Edmondson Pike	51,060

As noted above, nearly 60,000 vehicles per day pass through the study area at a central intersection, higher than many congested interstate highways. Such high traffic counts suggest that the corridor, including primarily the portions of the study area south of I-440 offer extremely good exposure for businesses.

Inventory, Land Use and Zoning

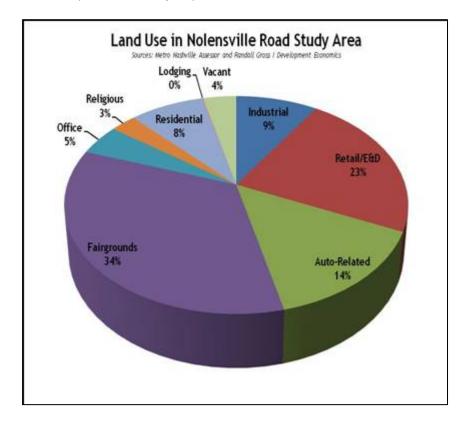
Nolensville Pike is one of the region's primary commercial corridors and contains a substantial amount of retail/commercial and industrial use. The corridor tends to have a more industrial character north of I-440 but quickly converts primarily to high-density retail use south of that highway. Zoning in the corridor had allowed for a very linear development of retail/commercial uses and there are few "bump-outs" in the zoning to allow for expansion of the commercial districts into the neighborhoods to alleviate commercial development pressure on the corridor.

³ Source: Tennessee Department of Transportation and Metro Public Works.

Further, parcels along the stretch from I-440 to the railroad overpass at Grassmere are relatively small and shallow, again limited expansion or redevelopment. Without larger sites, the ability to create viable mixed-use projects will be limited. The *South Nashville Community Plan* does try to address some of these issues by allowing more versatile use of sites, but the parcels themselves are still quite shallow along most of the corridor. The shallow lots, linear zoning patterns, and corridor-oriented character of the area is a key theme impacting on the historic and current development patterns in the area. Further, the corridor's commercial use is not disaggregated or segmented into districts separated by open space, housing or other uses. As such, the continuous, monotonous road-hugging linear commercial is part of what gives the corridor its drab appearance and what reduces the visual recognition of specific businesses or the area's unique characteristics.

Land Inventory

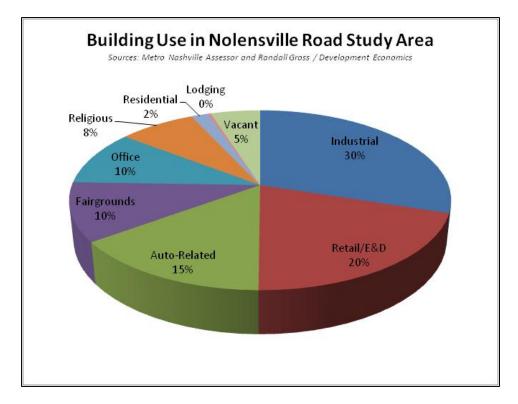
The study area, defined as that portion of the Nolensville Pike Corridor from I-65 Inner Loop to the railroad overpass at Grassmere, including adjacent areas, has a total of 350 acres. The Tennessee State Fairgrounds Site (the "Fairgrounds Site") constitutes 34% of this land or 117 acres. Aside from the Fairgrounds, retail and eating & drinking uses comprise 23% of the land, followed by auto-related uses (retail and repair) at 14%.



Industrial land occupies about 9% of the total land inventory but a significant share of land north of I-440. Residential uses in adjoining areas (several blocks off of Nolensville Pike) comprise about 8% of the land, with office at 5% and religious 3%. Less than 4% of the land or 14 acres total is open space or undeveloped. Thus, the character of this corridor is driven by retail/commercial and auto-related land use along with industrial and residential to a lesser extent.

Building Inventory & Use

There is approximately 1.5 million square feet of building use in the study area. Overall, about 30% of the building use is in industrial. But together, retail/commercial and auto uses comprise another 35% of corridor uses, with 15% in auto-related alone. About 10% of the study area building space is occupied by offices, and another 10% by Fairgrounds buildings which are not likely to remain if the site is redeveloped. About 8% of building space is taken by churches, mosques, and other religious uses, with only 2% in residential and less than 1% in lodging. About 5% of the study area's building space (72,900 square feet) is vacant, a relatively healthy number for an older, crowded, inner-city commercial corridor. Overall building inventory is summarized in the chart below.



There are nearly 360 buildings in the study area, of which 90 are mainly in retail use, 24% in auto-related and 23% in industrial. Another 16% are office.

NOLENSVILLE PIKE STUDY AREA, 2010										
Туре	Number	%	Sq. Ft.	%	Land (Ac)	%				
Industrial	81	23%	442,303	30%	31.6	9%				
Retail/E&D	90	25%	298,161	20%	84.7	24%				
Auto-Related	86	24%	219,289	15%	49.6	14%				
Fairgrounds	1	0%	156,000	11%	117.0	33%				
Office	57	16%	146,923	10%	15.9	5%				
Religious	13	4%	112,409	8%	9.7	3%				
Residential	8	2%	24,204	2%	28.6	8%				
Lodging	1	0%	5,402	0%	0.5	0%				
Vacant	20	6%	72,855	5%	12.7	4%				
TOTAL	357	100%	1,477,546	100%	350.3	100%				
0	Matura allian	0	at a China ha dina D		0					

Table BUILDING AND LAND USE INVENTORY, NOLENSVILLE PIKE STUDY AREA, 2010

Sources:

Metropolitan Government of Nashville & Davidson County and Randall Gross / Development Economics.

The amount of space in retail use is roughly equivalent to the size of a small shopping mall, but the average size of the units is somewhat smaller than those found in shopping malls. There is only one lodging facility, a vintage highway motel that has about 5,400 square feet. On the other hand, there are nearly 90 auto-related businesses occupying 219,300 square feet. The amount of space that they occupy (15%) and the land area they occupy (14%) are not overwhelming. However, the sheer number of auto-related businesses (nearly 25% of the number of uses) lends the corridor the impression of being primarily or largely an auto service and sales corridor.

Business Mix & Operations. Detailed analysis of the existing business mix is provided within each of the market analyses. In general, retail businesses are oriented to shopper's goods and eating & drinking rather than to convenience goods.⁴ As such, the corridor is already somewhat of a destination for comparison shopping, although the existing market is driven primarily by residents of southeast Nashville with only limited inflow from other areas. There is very limited existing destination entertainment use.

⁴ Shoppers Goods includes merchandise for which the consumer will occasionally "comparison" shop, requiring longer trips to more destinations. Convenience Goods includes necessities such as groceries which consumers purchase on a regular basis, often at locations convenient to home or along the commute to work.

There is a preponderance of businesses that are either owned by or serve

a primarily foreign-language population base. More than 60% of businesses have signage with information in a language other than English. Spanish predominates, but there are also signs in Persian, Arabic, Hindi and east Asian languages.

As noted above, there is a large number of auto-related businesses including a large number of used car lots, as well as mechanics, collision repair, auto supply, and other automotive-related





businesses. There are also a number of loan companies that help with financing cars and other merchandise. Many of the used car lots in the corridor offer "buy now/pay now" financing targeted at recent immigrants that has been characterized by some as predatory lending. Various unethical practices by a minority of shady business owners taints the honest efforts of the majority. There is an apparent need to control these problems because they do impact on the overall image and perception of the business community in the area.

Industrial businesses range from craft-oriented manufacturers, many of whom are clustered in the 4th Avenue South area, to machine shops, food manufacturers, testing companies, building contractors, industrial service, building supply, and others. There are a number of window and door companies in the corridor, including one of the largest new businesses to move into the area. Office uses tend to be oriented to consumer needs, such as loan companies, insurance and travel agencies, etc. There are few corporate offices in the area, and medical office tends to be concentrated just south of the study area near Southern Hills Hospital.

Other Uses. Residential uses include single-family detached homes in neighboring communities like Chestnut Hill (Cameron Trimble), South Nashville, Woodbine, Glencliff, and Radnor among others. However, only those homes located within a block of the corridor are included in this study area. There are also apartment complexes and at least two high-rise senior homes within and adjacent to the study area. As noted previously, there is one lodging facility. The 13 churches and mosques form a very visible part of the corridor, with several

large and long-time churches located at prominent locations. Since the churches tend to break up the commercial congestion, they are more recognizable as landmarks in the corridor. Coleman Park is an important community asset, occupying a prime location at the intersection of Thompson Lane and Nolensville Pike. The park includes a newly-renovated and upgraded community center and the *South Nashville Community Plan* has proposed redevelopment around the park to create a more integrated node with a mix of new housing and community-serving retail.

Notable Anchors and Sites

The <u>Fairgrounds Site</u> is by far the largest and most prominent use within the study area itself, with more than a third of the total land area. The site has been the home of the Tennessee State Fair but primarily a site for stock car racing, a popular flea market, meetings, and other uses. The facility includes a Grandstand and eight buildings with a total of 117,000 square feet of space. Metro Government, which owns the facility, is in the process of assessing potential options for redevelopment and reuse partly because the fairgrounds have failed to generate sufficient revenue for self-operation but also because the site provides a much-needed opportunity within one mile of downtown for business development and corporate recruitment. This and other studies are meant in part to inform the Fairgrounds Site planning effort.

The <u>Nashville Zoo</u> is located at the southern end of the study area in Grassmere. This facility has become the largest visitor attraction in Nashville, attracting one million visitors per year. The Zoo is in expansion mode and has plans to add further attractions within the next several years, creating an even larger visitor attraction at this location.

The <u>City Cemetery</u>, a 31-acre historic site on the National Register, is situated along 4th Avenue South at the northern end of the corridor. The cemetery appears under-valued in its surroundings but is the final resting place of an interesting mix of people including Captain William Driver, who named the US flag "Old Glory."

Physical Conditions

As noted earlier, Nolensville Pike is a highway corridor with underdeveloped industrial areas as well as small, congested commercial properties. The corridor still operates as a highway, with poor pedestrian accessibility that the *Community Plan* aims to address. The appearance of the corridor is impacted by the congestion of commercial uses (a function in part of small, shallow lot sizes and individual curb cuts), a lack of definition for industrial areas, a lack of green landscape and urban design amenity, and the broad uninterrupted pavement of the road itself.

Auto Orientation



The lack of mass transit access contributes to the auto-oriented nature of the corridor not only in terms of traffic congestion but also the business mix. Since recent immigrants (who have clustered in southeast Nashville) are highly dependent on cars to commute to work, there has emerged a large number of cheap car dealers catering to this need. However, Nolensville Pike has always been known as a hub for automotive-related

retail and car dealerships. The shift has been from large new car dealers (of which there is now only one in the study area) to a proliferation of used car lots. In terms of appearance, the car lots only add to the cacophony of traffic, signs fences and wires with their rows of cars aimed at the roadway. A few businesses have introduced low screening (based on Metro interventions) but this does not really ameliorate the visual effect of a massing of cars against an already traffic-choked road. There is a need for better techniques, at least, to soften this visual impact while protecting the business's ability to market its product. Those techniques do exist and are presented among the strategic recommendations in Volume 1.

Signage

As noted in the *South Nashville Community Plan*, Nolensville Pike also has a proliferation of business and street signs that contribute to the visual congestion along the road. In a diverse and interesting business area like this, there is no need for uniform signage, but there is a need for control and for improving the visual impact.

Urban Design & Streetscape

The study area generally lacks any form of urban design or streetscape improvements that would provide a positive and pedestrian-friendly environment. Many years' accumulation of business and street signage, overhead wires, telephone poles, and other clutter provide a relatively negative image of the physical environment in the area. The study area does offer sidewalks and pedestrian access, but it is uneven and pedestrian (and bicycle) unfriendly.

There have been some improvements made (such as pavers) in the "Flat Rock" area to the north of the Thompson Lane intersection. However, these ground-level improvements are too hidden and conservative to make a difference amidst the barrage of traffic and signage in this busy area. Aside from Coleman

Park there is also a distressing lack of green landscape in the entire study area up until the Nashville Zoo. There is little to break the numbing monotony of the commercial uses and signage. Given the relatively high speed at which traffic travels along the road (with the possible exception of rush hours at intersections), and the lack of clear anchors/stopping points, it is likely that many commuters and pass through drivers fail to notice the unique business offering in the area. Again, the *South Nashville Community Plan* seeks to address some of these issues but there may be a need for a larger scale of pro-active interventions.

Art & Architecture. Hidden gems do populate the corridor, in terms of

1940s/50s/60s architecture and artscape. The Hickerson Motel is a fine example of the vintage highway architecture that is motel fast disappearing from America's urban streets. Some of the churches in the area offer stately buildings, and some of the single-family housing in adjoining neighborhoods can be surprisingly grand. A number of businesses have taken it upon themselves decorate their to buildings or storefronts with original artwork and to promote diverse



music and cultural events. Some of the artwork can be described as "kitsch," but that is what also makes the corridor a more interesting place.



Funky Lanterns atop car wash



Art deco former filling station

There are some interesting features on buildings that were built in different eras, and these can be celebrated more through conservation and preservation programs. At the same time, there are also plenty of examples of poor design,



Trailer along commercial business strip.

March of the Fridges?

mass commercial architecture, and low-quality building stock. A visual inventory should be conducted to identify those unique characteristics that can help to strengthen the area's identity. There is also a plethora of outdoor merchandising, for better or worse, such as the fridges seen above or stacked tires and other flotsam and jetsam of trade. In some cases, this outdoor marketing can be interesting, but more often it is not and there is a need for more regulatory control.

Summary

Nolensville Pike is a major commercial corridor leading from downtown Nashville to Nolensville. It has developed with an auto-orientation not only in its physical character but also in terms of its business mix and largest recreational activity (stock car racing). Industrial areas in the northern end of the study area are ill-defined and there is under-developed land including the Fairgrounds Site. Yet, south of I-440, shallow retail/commercial parcels are crowded amidst a cacophony of nearly 60,000 cars traveling daily through the study area, 90 used car lots, car part suppliers, car financing agencies, car insurers, and other businesses, churches, telephone poles, overhead wires, a thousand signs, and few trees. At the same time, this corridor has an exceptional location with access to five interstate highways, a regional rail yard, an international airport, executive housing areas, a zoo amenity, and downtown Nashville. Thousands of recent immigrants and foreign-born residents have found their way to this area and the many locally-owned businesses cater to this burgeoning market.

Section 3. INDUSTRIAL MARKET ANALYSIS

This section presents findings from an industrial market analysis conducted for the Nolensville Pike study area. The market analysis examined existing industrial uses and conditions, market trends, and the industrial economy. Market area demand for industrial space is forecasted and industrial capture and market potential within the study area is defined. Based on these market forecasts, recommendations are made with respect to the most viable opportunities, typologies, and locations for industrial development (or redevelopment) within the study area.

Background

South Nashville developed early as an important industrial node, largely due to the presence of the railroads. Several interregional rail lines (e.g., Louisville & Nashville and Tennessee Central) converged in the area. These lines, coupled with a good highway system, helped provide the area with unparalleled access for freight shipping and multi-modal transportation. Early

industrial development in the Nolensville Pike area included textile manufacturers (e.g., May Hosiery Mills at Chestnut Street and 4th Avenue South), as well as lumber yards, grain storage facilities, food distributors (Purina), fuel suppliers, and other bulk good distributors that depended largely on the economies of scale offered by rail transport.

The development of Radnor Yards in south Nashville as a major regional freight transfer node, along with Interstate Highways 24, 65, and 40; and Berry Field (Nashville International Airport) cemented south / southeast Nashville's predominant role as an industrial hub.



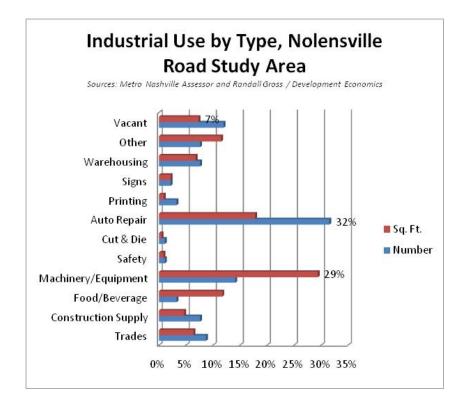
Rail Transport

As noted above, railroads weave throughout the Nolensville Pike area and a major regional switching yard is located just west and south of the study area. The Tennessee Rail Plan, completed in 2002, projected that Tennessee would

see an increase of 16% in inbound rail freight between 2010 and 2020, and 22% in outbound freight during the same period. Nashville captures a substantial share of this freight, much of which moves through the CSX rail yards near Nolensville Pike. The plan also saw potential for 2.1 million tons of additional freight that could be transferred from road (I-40) to rail through the development of an east—west rail corridor. Again, much of this freight would move through Nashville.⁵ Proximity to rail is only nominally important to industrial businesses in the area today, with more locating in the area because of central location and proximity to I-440 and the interstate highway system. Nevertheless, the presence of rail clearly provides an opportunity for attracting distribution as more freight shifts from road to rail with higher fuel prices, better east-west service, and improved rail efficiencies.

Inventory

There is a total of 92 industrial (manufacturing, warehousing, industrial service, automotive service, and related) businesses located along the Nolensville Pike Corridor within the study area. These businesses occupy a total of about 500,000 square feet of space. However, there are a number of other industrial businesses located in adjoining areas such as Allied Drive.



⁵ Arcadis C&M, Inc. Tennessee Rail Plan, prepared for the Tennessee Department of Transportation, June 2002.

Of the businesses located directly within the corridor, nearly one-third are engaged in **automotive services**, e.g., repair and maintenance. These businesses occupy about 18% of the space. **Machinery and equipment** businesses occupy nearly 30% of the space but account for 14% of the total number of industrial businesses. Other types of industrial businesses occupying industrial building space within the corridor include food & beverage companies (12%), warehousing (7%), building trades (6%), construction supply (5%), sign companies (2%), and a mix of security, cut & die, printing, and other companies. There is a clustering of recycling and re-manufacturing businesses and there are



several companies that make wood products including doors and windows. About 7% of the industrial building space in the corridor is vacant.

There is a strong of multi-tenant industrial spaces clustered along the east side of 4th Avenue South, across from the City Cemetery. These spaces (and units behind) are generally occupied by small building suppliers and contractors, showrooms, auto mechanics, machinery & equipment suppliers, and industrial service companies. Further south along Nolensville Pike are more consumer-oriented auto service businesses fronting the street as well as larger single-tenant industrial buildings located on side streets, mainly on the west side of Nolensville Pike (e.g., Allied Drive or Napoleon Street) along the rail lines. Among the larger businesses in the area are the following:

- **Crystal Springs**, a water distribution company located adjacent the City Cemetery at 1131 4th Avenue South that serves the downtown area's offices and residents with bottled water and related products. The company distributes its product from 13,300 square-foot warehouse at this somewhat cramped location.
- Woodstock Vintage Lumber, supplying reclaimed heart pine flooring, farm tools, and other recycled wood products from this 1.2-acre lumber yard at 1225 4th Avenue South. Formerly site of a large Purina Animal Feed Mill.
- Italia Granite Showroom, located in about 10,000 square feet of space at 1044-48 4th Avenue South and supplying granite for kitchen counter tops and other uses for 34 years.
- Grooms Engine relocated to a 110,000 square-foot facility at 1414 4th Avenue South from the SoBro area partly as a result of convention center construction and related changes underway downtown but also out of a need for expansion. The company is among the few growing specialty engine re-manufacturers in the United States. Grooms Engine is unique in the business because the company remanufactures its engines through the use of skilled craftsmen. The company is in space formerly occupied by Tennessee Mat Company (TMC), which recycled tires into commercial and industrial matting (brand name Wearwell) for more than 40 years at this location and in adjoining buildings on 3rd Avenue South. TMC has since relocated to new facilities in Lavergne.
- **Ryan/Reynolds, Inc.**, mechanical contractors located in an 11,445 square foot warehouse building at 1511 4th Avenue South.
- **Mid-State Door & Window** is located in a 6,100 square-foot building at 1701 Nolensville Pike, built in 1945.
- **Dyke Industries** relocated recently to Nashville and occupies 58,872 square feet of warehouse space at 1920 Nolensville Pike. Unlike other older industrial buildings in the area, this facility offers relatively high ceilings (21-foot) and truck bays. The company manufactures doors & windows.



- **Tennessee Clutch & Supply** occupies a 14,250 square-foot building at 1995 Nolensville Pike. This ca 1972 building has 14-foot ceiling heights.
- **E&S Auto Paisano** is an auto repair business with associated used car sales, located in 6,500 square feet at 2103 Nolensville Pike.
- Ford Brothers Tire Recappers, located at 3000 Nolensville Pike, operates out of a 5,500 square-foot building.
- **Guardado's Produce** shares a 40,000 square-foot warehouse with the **RK Moore Foodservice**, at 2003 Nolensville Pike. Guardado distributes food "de la puerta a su mesa!" (from the door to your table).

Among the businesses located in Allied Drive, Napoleon Street, Foster Avenue, and other industrial areas adjacent the Study Area are Falcon Fabricators, Harlan Electric, Expanded Foam Products, Five Star Food Service, A.Schulman (resins), Komar Screw, Austin Products (signs), Lewis Letterworks, Parris Printing, Custom Woodwork, Safety Kleen, Carma Performance Engines, and others. Nearby industrial areas like <u>Sidco Drive</u> and <u>Four-Forty Business</u> <u>Center</u>, located west of the rail lines, are competitive locations for industrial use.

The existing industrial building stock along the corridor ranges from poor to good condition but was generally built with low ceilings and columned space that is less marketable by modern standards for bulk distribution. However, there are exceptions, especially with the presence of newer, medium-grade, columnfree industrial buildings along Allied Drive.

Industry Trends

As a basis for assessing demand for industrial space, it is important to examine regional trends in manufacturing and other key sectors. Overall sector trends are discussed below in the context of international trade and technology development. Specific industry employment trends are then analyzed both for Nashville and for the broader metropolitan region.

Overall Sector Trends

Labor-intensive manufacturing businesses have naturally sought locations where labor and other operating costs are low and where collective action is minimized. The "Rust Belt" emerged in the 1970s as heavy manufacturing relocated from union-rich northern states like Ohio, Michigan and Pennsylvania to Tennessee and other low-wage, "right-to-work" states in the south. However, as the automobile manufacturing industry spread south in the 1980's with giant plants like Saturn in Spring Hill, union activity tended to follow.

The North American Free Trade Agreement (NAFTA) ensured that Mexico could compete more effectively for low-wage manufacturing jobs and some industry moved further south of the Rio Grande. Lower trade barriers worldwide also allowed for the free movement of production activity to Asia and other low-wage regions. This coincided with the opening of China to foreign investment and that country's overall movement to free-market capitalism that allowed jobs to flow east. While U.S. manufacturing employment had generally fallen since the 1980s, reduced trade barriers have helped accelerate the outflow of jobs since 2000.

The explosion of free trade has reduced demand for heavy manufacturing space in Nashville and throughout the US but has increased demand for space accommodating "light" manufacturing and assembly of imported components,

along with bulk warehousing space to accommodate distribution of imported product.

Equally, if not more important, is the impact of emerging new technologies that have gradually reduced manufacturer's dependence on labor and therefore, pushed down operating costs. Many American businesses have invested in new technologies and capital equipment that have increased overall efficiencies and reduced labor costs. Thus, some manufacturing sectors have grown in output and profitability since 2000 despite (or because of) a reduction in employment. The logistics industry has grown in importance as an amalgam of transportation, warehousing, and communications technology aimed at increasing efficiencies in an era of rising fuel and transport expenses.

Over time, more manufacturing is likely to be retained in the US as the comparative cost advantages of overseas production aimed at the American consumer market fall amidst rising transport costs. Cities like Nashville that have always maintained a diverse economic base can again attract and grow strong, efficient, clean manufacturing businesses. Nashville's central location and logistical advantages can help the city capture a large share of future manufacturing growth.

Regional Manufacturing Employment Trends

During the early and mid-20th century, Nashville's industrial character was driven by the manufacture of textiles, chemicals, auto glass, and aircraft; printing & publishing; and trucking. The city once had a large record-pressing industry in support of its music business. By the late 20th century, the region had attracted a substantial automotive manufacturing component with the arrival of Saturn, Nissan, and Bridgestone. Since that time, many of the region's larger manufacturing industries have generally stagnated or declined, while warehousing and distribution and specialty light manufacturing activities have increased.

The 13-county Nashville Metropolitan Statistical Area (MSA) had total manufacturing employment of about 72,250 in 2008 (the latest year for which atplace employment data are available). This number is down by 10,500 or 12.7% from 1998. This loss of an average of 7,300 jobs (1.2%) per year over ten years occurred during a relatively prosperous period of economic growth for the region and the nation as a whole. The impacts of foreign competition and new labor-saving technologies have clearly impacted on the Nashville region's manufacturing employment base. All of this decrease in employment occurred before the current economic recession, which has only exacerbated the existing problems for the sector. Overall manufacturing employment trends are summarized in the table that follows.

				1998	-2008 Chan	ge
NAICS	Industry	1998	2008	Change	Percent	Per Year
311	Food	5,227	7,209	1,982	37.9%	3.4%
312	Beverages & Tobacco	1,297	956	(341)	-26.3%	-2.4%
313	Textiles Mills	1,997	1,156	(841)	-42.1%	-3.8%
314	Textile Product Mills	1,220	948	(272)	-22.3%	-2.0%
315	Apparel Products	1,651	334	(1,317)	-79.8%	-7.3%
316	Leather Applied Products	940	195	(745)	-79.3%	-7.2%
321	Wood Products	3,249	2,151	(1,098)	-33.8%	-3.1%
322	Paper Products	2,606	1,769	(837)	-32.1%	-2.9%
323	Printing & Related	7,856	5,295	(2,561)	-32.6%	-3.0%
324	Petroleum & Coal	106	193	87	82.1%	7.5%
325	Chemical Manufacturing	1,913	1,847	(66)	-3.5%	-0.3%
326	Plastics & Rubber	5,337	5,599	263	4.9%	0.4%
327	Non Metallic Mineral Products	3,608	3,341	(267)	-7.4%	-0.7%
331	Primary Metal	2,469	2,226	(243)	-9.8%	-0.9%
332	Fabricated Metal Products	9,427	6,301	(3,126)	-33.2%	-3.0%
333	Machinery	5,878	4,075	(1,803)	-30.7%	-2.8%
334	Computer, Electronic Products	3,044	4,209	1,166	38.3%	3.5%
335	Electric Equip., Appliances	6,375	4,883	(1,492)	-23.4%	-2.1%
336	Transportation Equipment	11,702	14,222	2,520	21.5%	2.0%
337	Furniture & Related Products	4,009	3,231	(778)	-19.4%	-1.8%
339	Miscellaneous	2,858	2,112	(746)	-26.1%	-2.4%
	TOTAL	82,767	72,251	(10,516)	-12.7%	-1.2%
Note	Several industry's ampleument estimated k	acad on Consula ran	7 00			

Table 10. MANUFACTURING EMPLOYMENT TRENDS BY INDUSTRY, NASHVILLE MSA, 1998-2008

Note Several industry's employment estimated based on Census ranges. Total reflects actual total of all industries.

Sources: U.S. Bureau of the Census and Randall Gross / Development Economics.

Transport Equipment. Despite the overall fall in manufacturing employment in recent years, several specific manufacturing industries have continued to grow and add employment in the Nashville MSA. The transportation equipment manufacturing industry, for example, added more than 2,520 jobs or 21.5% (2.0% per year) between 1998 and 2008, prior to the current downturn. By 2008, the Nashville MSA had over 14,200 transport equipment manufacturing jobs, making this industry by far the largest manufacturing employer in the region.

....

Rather than moving production overseas, foreign and domestic automobile companies located and retained production in the US partly in order to avoid a backlash from American workers and consumers. Middle Tennessee forms part of a still-growing automobile manufacturing corridor that extends from Detroit south into Alabama. The Nashville area has also been successful in attracting corporate offices for the transport industry in recent years. Major transport equipment production facilities and offices in the Nashville region or nearby include:

	<u>Company</u>	Location	<u>Product</u>	<u>Jobs</u> (Est)
• • • •	Ford Motor Company* General Motors Nissan North America Nissan North America Stratos Boats Bridgestone Americas Bridgestone Americas	Murfreesboro Lavergne	Automotive Glass Engines, Components 5 Vehicles Corporate Headquarters Fishing Boats Tires Corporate Headquarters	<1,000 1,045 6,700 1,000 750 700 700
• • • • •	Various Suppliers (San Automotive Comp. Johnson Controls TRW Automotive Unipres Vultee Aircraft, Inc.	nple): Nashville Murfreesboro Lebanon Portland Nashville	Automotive Glass Auto Seats Auto Components Auto Parts Aircraft Wings, Parts	950 660 650 600 500

*Plant now operated by Zeledyne.

General Motors has cut back drastically at its former Saturn plant, once the largest single investment in automotive manufacturing in the country. More than 2,000 workers were laid off from the plant in 2009, with 800 relocating to other states. However, GM recently announced that 483 workers were being called back to the plant as demand increases for vehicles with its Ecotec engine.⁶ Other plants also laid off workers during the current economic downturn. Bridgestone, for one, laid off nearly 700 workers in 2009. At the same time, however, middle Tennessee suppliers have won contracts with Volkswagen to supply its massive new automotive plant under construction in Chattanooga. New suppliers continue to enter the market. For example, Indiana-based NHK Seating of America recently announced construction of an auto seat manufacturing plant in Murfreesboro that will employ 225 by 2015.

Transport equipment manufacturers are often among the few remaining old-line producers in "second-tier" inner-city industrial locations. However, this often applies to coastal cities like Norfolk and Baltimore, where shipbuilding and

⁶ "GM Recalling 400 UAW workers at Spring Hill." Associated Press news release, September 14, 2010.

automotive assembly benefited from access to large ports located near the inner cities. Today's transport equipment manufacturers generally prefer to be located in suburban areas near Interstate Highways. Rail equipment manufacturing generally died in the US along with passenger rail transport and the urban trolley systems. However, overseas investment in passenger rail never ceased and there will be increased investment in domestic rail systems due to Federal initiatives, growth of commuter rail systems, and awareness of road vehicles' impact on global warming. Foreign firms like Berlin's Bombardier, Inc. control a vast share of the market for new rail equipment.

Food Products. The food industry employed 7,200 in 2008, making it the second largest manufacturing employer in the Nashville MSA. This industry added nearly 2,000 jobs (or 37.9%) in the MSA between 1998 and 2008, prior to the current downturn. The industry thus expanded in the region by an impressive 3.4% annual growth rate between 1998 and 2008. Food production, like that for transport products destined for the American market, never really left the country. Many food products are still manufactured close to the market base and, with the increased awareness of local source foods as a solution to global warming there is renewed interest in local food production.

Nashville makes a competitive location for food production because of its central location with one-day truck and rail access to 70% of the American market. The city is also located between agricultural regions (California, Florida, and Midwest), and has a relatively reliable supply of power and water, providing it with a logistical advantage for key inputs and production. Among the region's larger food companies are General Mills and Robert-Orr Sysco (distributor), with about 700 employees each.

Computer & Electronic Products. Another growing industry in the Nashville region has been computer & electronic products, which added about 1,200 jobs (38.3%) during the ten-year period before the downturn. While the industry is not among the largest among manufacturers in the region (employing 4,200, ranked 7th), it is nevertheless growing in sync with the use of technology in consumer products.

Other Industries. Other major manufacturing employers include fabricated metal producers (often supplying the automotive industry), plastics & rubber companies (many engaged in packaging), and printing & publishing. <u>Printing & Publishing</u> has always been an important industry to Nashville. The presence of a large publishing industry helped support the growth of Nashville as a center for music and songwriting. Religious publishing houses are an historic component of Nashville's industrial character. Even today, United Methodist Publishing House is among the region's largest employees), Ingram Book Group (2,050), Gannett (1,100), RR Donnelly (800), and other publishing houses help keep the region's presses running. While the region has retained its comparative

predominance, Printing & Publishing employment has declined precipitously during the past ten years, with the loss of 2,600 jobs or 32.6%. Emerging technologies and web-based applications are having an undeniable impact on Nashville's signature publishing and music industries.

Even with the steep decline, Printing & Publishing did not suffer the worst employment decrease during this period. Leather products and apparel each saw a nearly 80% drop in employment in the Nashville region. Apparel lost 1,300 out of the region's 1,650 jobs. Leather lost 745 out of 940. The labor-intensive apparel industry has been relocating overseas for several decades, but this exodus clearly continued in Nashville into recent years. The region is in danger of losing its clothing manufacturing industries altogether.

The region has a diverse set of other manufacturing concerns which still includes some traditional industries like textiles (such as FiberWeb in Old Hickory that makes polyester yarn) and chemicals (with the 88-year old DuPont Chemicals plant still operating, also in Old Hickory). Furniture, non-metallic mineral products, electrical equipment, appliances, and other products are manufactured in the region. Perhaps the least represented is Petroleum & Coal, with less than 200 employees counted in this industry in 2008.

Manufacturing Employment in Nashville

Manufacturing trends in Nashville-Davidson fairly mirror those of the region as a whole. The city had about 23,000 manufacturing jobs in 2008, or 32% of the MSA total. However, this is down from 30,200 (23.8%) in 1998, when the city had 36% of the region's manufacturing employment. Thus, Nashville has been losing its share of the region's manufacturing even as the regional base has declined.

As in the region, the hardest hit industries in Nashville have been apparel (down 87%) and leather (down by 97%). The city's leather industry is practically non-existent with only ten remaining jobs in 2008. Wood products, fabricated metals, and transport equipment employment have also fallen significantly in Nashville during the past ten years (and no doubt since). At the same time, there has been growth in several manufacturing industries in the city, including primarily food (up by 1,400 jobs or 50%) and furniture (up by 240 jobs or 31%).

Food & Beverage. The increase in food production is not too surprising, again given Nashville's comparative advantages as a growing and centrally-located transport hub and the fact that food production has not moved overseas. This bodes well for inner-city areas like Nolensville Pike, since food producers tend to locate in the central areas of the region for the broadest possible local distribution coverage. Bakeries, dairies, and restaurant suppliers like to be in inner-city locations near highways in order to get their product to the local/regional market as quickly (and freshly) as possible. Some of the growth in

Nashville's food production can also be traced to the growing immigrant population in the city and their demand for fresh product. Tortilla manufacturing has boomed in Nashville thanks to the growth of the Latino population base as well as the number of Latin American restaurants. Beverage production is another industry that is often concentrated in central-city industrial areas due to the need for central locations for breweries and bottling plants. While Nashville saw some decrease in beverage production, the loss was not as great as in the manufacturing sector as a whole. The city is giving rise to artisan beverage niches such as coffee and beer producers with their own private labels.

				1998-2008	Change	
NAICS	Industry	1998	2008	Change	Percent	Per Year
311	Food	2,731	4,097	1,366	50.0%	4.5%
312	Beverages & Tobacco	778	629	(150)	-19.2%	-1.7%
313	Textiles Mills	1,660	1,057	(603)	-36.3%	-3.3%
314	Textile Product Mills	1,145	619	(527)	-46.0%	-4.2%
315	Apparel Products	723	94	(630)	-87.1%	-7.9%
316	Leather Applied Products	302	10	(293)	-96.9%	-8.8%
321	Wood Products	721	338	(383)	-53.1%	-4.8%
322	Paper Products	771	472	(299)	-38.8%	-3.5%
323	Printing & Related	4,998	3,031	(1,967)	-39.4%	-3.6%
324	Petroleum & Coal	67	88	21	31.3%	2.8%
325	Chemical Manufacturing	801	583	(218)	-27.2%	-2.5%
326	Plastics & Rubber	1,106	1,077	(29)	-2.6%	-0.2%
327	Non Metallic Mineral Products	2,366	1,756	(610)	-25.8%	-2.3%
331	Primary Metal	175	224	49	28.0%	2.5%
332	Fabricated Metal Products	3,240	1,730	(1,510)	-46.6%	-4.2%
333	Machinery	2,084	2,087	3	0.1%	0.0%
334	Computer, Electronic Products	460	448	(12)	-2.6%	-0.2%
335	Electric Equip., Appliances	412	292	(120)	-29.1%	-2.6%
336	Transportation Equipment	3,461	2,044	(1,417)	-40.9%	-3.7%
337	Furniture & Related Products	784	1,024	240	30.6%	2.8%
339	Miscellaneous	1,364	1,286	(78)	-5.7%	-0.5%
	TOTAL	30,149	22,984	(7,165)	-23.8%	-2.2%

Table 11. MANUFACTURING EMPLOYMENT TRENDS BY INDUSTRY, NASHVILLE-DAVIDSON, 1998-2008

Notes: Several industry's employment estimated based on Census ranges. Total reflects actual total of all industries.

Sources: U.S. Bureau of the Census and Randall Gross / Development Economics.

Furniture. Furniture production is seeing a revival in a number of American cities as more consumers demand hand-crafted or specialty designed home and office furnishings. High-quality production has a niche market as opposed to lower-quality imports, and is less price sensitive than apparel or other necessities that have gone into mass production overseas. Again, this is good for central-city industrial areas where there are more likely to be craft workshops and an artisan community. The Nashville region has a concentration of door and window manufacturers, including at least two in the Nolensville Pike Corridor (one of which recently located there).

Other Industries. Nashville's printing & publishing industry saw a 39% decrease in employment during the ten-year period, again partly resulting from the impact of new competitive media. Many publishers see a role for themselves in a more web- and technology-based future and have made the transition into production of web content for example. The transition suggests that jobs are transferred from printing press operators to web designers and computer programmers, still often considered a form of production. There are clearly opportunities for Nashville to take a lead in this arena, given the talent that the city attracts and the availability of resources.

Some industries like machinery and metals manufacturing have remained surprisingly buoyant in recent years, perhaps because they have already shed so many jobs in past decades. Some machine companies manufacture specialty product that has a niche or unique market. Nashville's fabricated metals and transport equipment industries were still shedding thousands of jobs even before the recession.

Nashville's Share of Region

The city has attracted concentrations within certain industries that suggest an historic role or in some cases, a competitive advantage. The city's highest concentrations are in textile mills & products, beverages, miscellaneous manufacturing, food, printing, non-metallic mineral products, machinery, petroleum, and (increasingly) furniture. Nashville's share in some of these industries actually increased during the past ten years, particularly machinery, miscellaneous manufacturing, furniture, textile mills, beverages, and food. As noted previously, central cities are particularly competitive for food & beverage production due to their central location within the region. Furniture and machinery has also become more concentrated in the central city, perhaps due to the presence of technicians and artisans who are more concentrated there. In general, specialty manufacturing tends to locate where there are unique skills, artisans, and craft abilities. Nashville's share of regional manufacturing employment from 1998 to 2008 is shown in the table that follows.

Table 12. NASHVILLE AS SHARE OF REGIONAL MANUFACTURING EMPLOYMENT, 1998-2008

Industry	1998	2008
Textiles Mills	83%	91%
Beverages & Tobacco	60%	66%
Textile Product Mills	94%	65%
Miscellaneous	48%	61%
Food	52%	57%
Printing & Related	64%	57%
Non Metallic Mineral Products	66%	53%
Machinery	35%	51%
Petroleum & Coal	63%	46%
Furniture & Related Products	20%	32%
Chemical Manufacturing	42%	32%
Apparel Products	44%	28%
Fabricated Metal Products	34%	27%
Paper Products	30%	27%
Plastics & Rubber	21%	19%
Wood Products	22%	16%
Transportation Equipment	30%	14%
Computer, Electronic Products	15%	11%
Primary Metal	7%	10%
Electric Equip., Appliances	6%	6%
Leather Applied Products	32%	5%
TOTAL	36%	32%
Sources:	US Bureau of the C and Randall Gross ,	

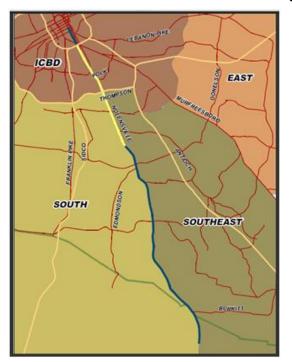
Development Economics.

Overall Market Trends

Overall market trends are summarized in terms of inventory, rents, occupancy, and other factors. The trend data was collected from a variety of sources but in general represents a sample of total industrial real estate. Most samples only include buildings over 10,000 square feet, although smaller buildings are also examined in some cases.

Market Area and Sub-Markets

There are six standard sub-markets recognized within the Nashville industrial market. These sub-markets include the IBD or ICBD (Inner City Business District), North, Southwest, Southeast, East, and West. The Nolensville Pike Corridor straddles the IBD, Southeast, and Southwest sub-markets and therefore is considered part of all three. However, most of the industrial activity in the corridor is concentrated either along 4th Avenue South (IBD) or on the west



side of Nolensville Pike near the railways and thus within the Southwest Sub-Market. Other than IBD, these submarkets extend out into suburban ring counties, particularly to the southeast where there has been and east. substantial industrial development in Rutherford and Wilson counties. respectively. In general, newer industrial development has tended to follow the path of Interstate Highways 40-East, 24-East, and (to a lesser extent) 65-North, with larger "high-cube" distribution space located further out on less-expensive land. The development of a ring road (840) has already begun to spur new industrial development on virgin land in the outer suburbs.

Map Source: Metro Nashville Planning

Total Inventory

The market has a total of about 160 million square feet of industrial space. The largest share of this space is concentrated in the Southwest and Southeast sub-markets, which together account for about 41% of the total. The Southeast sub-market alone has almost 51 million square feet of industrial space. There is about 14 million in the Southwest sub-market. The Inner City has about 18 million square feet. Overall existing market conditions are summarized in the table that follows.

				Ave	erage Rer	ntal Ra	tes
Sub-Market	Total Inventory	Vacant	Vacancy Rate	Whse	Distrib.	R&	D/Flex
1000	47.070.044	4 005 007	0.404	•	4.05	•	0.00
ICBD	17,872,944	1,085,337	6.1%	\$	4.05	\$	6.89
North	39,702,440	3,787,781	9.5%	\$	3.01	\$	6.87
Southwest	13,692,448	1,018,203	7.4%	\$	3.90	\$	8.44
Southeast	50,854,229	8,371,271	16.5%	\$	3.53	\$	7.01
East	25,675,765	4,279,364	16.7%	\$	3.95	\$	7.64
West	10,531,595	659,060	6.3%	\$	4.78	\$	-
TOTAL/Ave	158,329,421	19,201,016	12.1%	\$	3.64		7.20

Table 13.SUMMARY MARKET CONDITIONS, NASHVILLE INDUSTRIAL MARKET,
3RD QUARTER, 2010

Sources: Xcelligent, Grubb & Ellis, Nashville Commercial, and Randall Gross / Development Economics.

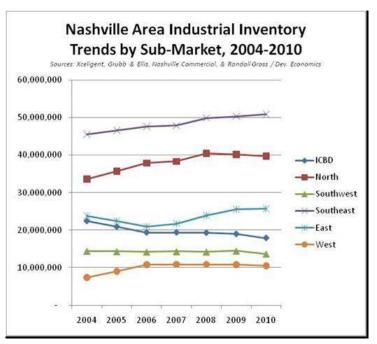
The overall inventory increased by 11.1 million square feet or 7.6% between 2004 and 3rd Quarter 2010. The North sub-market saw the addition of 6.1 million square feet or 18.3% during this period, followed by the Southeast sub-market, with 5.3 million square feet or 11.7%. The most rapid growth was experienced by the West sub-market, which added 10.5 million square feet or 43.2% to its relatively small base of 7.4 million square feet.

Table 14. INDUSTRIAL INVENTORY TRENDS BY SUB-MARKET, NASHVILLE MARKET, 2004-2010 (Q3)

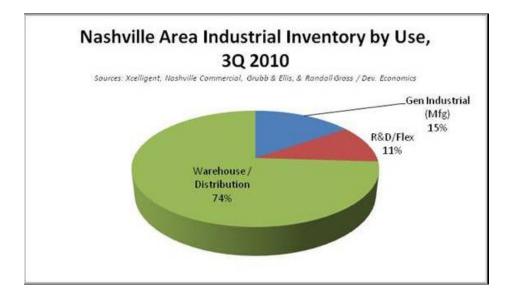
			2004-2010 C	hange
Sub-Market	2004	2010	Number	Percent
ICBD	22,476,880	17,872,944	-4,603,936	-20.5%
North	33,556,822	39,702,440	6,145,618	18.3%
Southwest	14,463,228	13,692,448	-770,780	-5.3%
Southeast	45,530,621	50,854,229	5,323,608	11.7%
East	23,797,627	25,675,765	1,878,138	7.9%
West	7,355,379	10,531,595	3,176,216	43.2%
TOTAL	147,180,557	158,329,421	11,148,864	7.6%
Sources:	Xcelligent, Grubb &	Ellis, Nashville Co	mmercial, and	

Irces: Xcelligent, Grubb & Ellis, Nashville Commercial, and Randall Gross / Development Economics.

Several sub-markets saw declining industrial inventory, partly due to a decrease in industrial activity and conversion to uses. The other ICBD inventory fell by 4.6 million square feet or 10.5% over the six-year period. The Southwest sub-market saw a less dramatic decrease of 771,000 square feet or 5.3%. The trends are disaggregated by submarket and vear in Appendix Table 1. These industrial trends in inventory by sub-market are illustrated in the chart.



The industrial inventory was also examined by type of space. Current conditions suggest that the vast majority of the region's industrial building use is in warehouses and distribution facilities, accounting for 74% of all space. General industrial, which includes purpose-built manufacturing buildings, accounts for about 15% of the space. Multi-tenant R&D and "Flex" space (individual office/warehouse units with tenant fit out) accounts for only 11% of the region's industrial inventory.



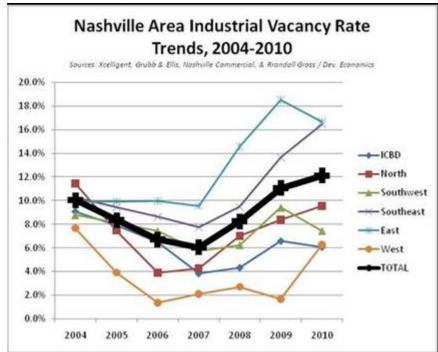
Vacancy

As of 3rd Quarter 2010, the market vacancy was determined to be 12.1%, or 19.2 million square feet of industrial space. However, vacant space was concentrated in several areas such as the Southeast, East, and North sub-markets. The East sub-market had the highest vacancy rate, at 16.7%, followed closely by the Southeast sub-market at 16.5%. Vacancy was relatively low in the ICBD (6.1%) and the West sub-market (6.3%).

The industrial market has cycled from a period of sustained growth and increasing occupancies through 2007, to a period of rapid decline and increasing vacancy that may have peaked in 2010. The year 2007 was clearly the top of the market cycle and the past three years has seen the down-side. It does appear, however, the industrial conditions are beginning to improve during the latter half of 2010.

Even at its current height, the vacancy rate has not exceeded 13% in the region, remarkable given the amount of construction that has taken place and the

growth in the overall inventory during the period through 2007. Developers have held down supply and delayed which projects, helped has to reduce the potential overhang in the market and the recovery period. Several submarkets, such as Southwest, East, and the ICBD, saw vacancy rates decline



starting in 2009. However, vacancy in the West and Southeast sub-markets shot up dramatically through 2010.

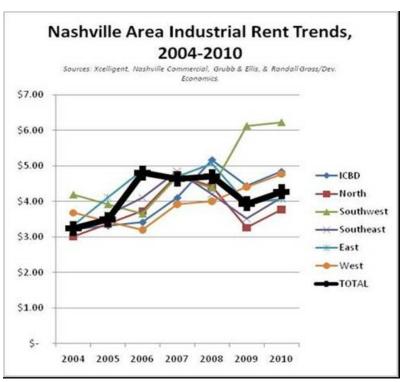
Occupancy in highway-oriented locations in Wilson and Rutherford counties has been driven by demand for high-volume, high-ceiling stacking ("cube") distribution space. Demand overall in the market has been largely driven by move-ups of individual businesses, typically in the range of 30,000 square

feet. The declining industrial base reduced the demand for industrial space in certain sub-markets and vacancy increased as a result. The Study Area benefitted to some extent by development in So-Bro (South of Broadway, in downtown) which has displaced industrial businesses or helped encourage them to relocate further south. The prime example of this type of activity is Grooms Engine, which relocated from the central business district further out to 1414 4th Avenue South.

The Study Area has added little new product, so occupancy is relatively tight given the age and quality of the building product. As noted earlier in this report, the central city is also competitive for food, catering, machinery, security, and other companies that need a central location to serve the regional market. Furniture, repair industries, and construction contractors are also attracted to inner-city locations.

Rents

Rents for warehouse and distribution space were averaging \$3.64 per square foot during the 3rd Quarter of 2010. Rents were lowest in the North sub-market and highest in the West. ICBD sub-market rents averaged \$4.05 per foot, а very respectable rate for inner-city industrial and in fact. areas second highest in the Meanwhile. reaion. R&D and Flex rents averaged \$7.20 per foot market-wide, with the lowest rents in the



North and ICBD and highest in the East. The central city flex market tends to capture the lower-end of the market base. Overall rent trends are summarized in the chart above.

Nashville area industrial rents stagnated between 2006 and 2008, then fell in 2009 before regaining some ground in 2010. Southwest sub-market rents increased dramatically in 2009, perhaps with the addition of new space. Most other sub-market rents rose and fell in line with market-wide trends.

Table 15.

Absorption

Industrial absorption in the Nashville market has averaged 1,815,300 square feet per year since 1996, which is a relatively healthy rate of positive growth. Absorption has only fallen in two years since that date, namely 2002 (with a drop of 1.7 million) and 2010 (1.5 million to-date). The latter represented the steepest percentage drop (907%), but the amount was still lower than 2002.

INDUSTRIAL ABSORPTION TRENDS, NASHVILLE MARKET, 1996-2010

Year	Square Feet	Change
1996	1,437,500	
1997	687,500	-52%
1998	4,250,000	518%
1999	4,677,750	10%
2000	4,200,250	-10%
2001	552,000	-87%
2002	-1,730,000	-413%
2003	401,250	-123%
2004	3,603,815	798%
2005	3,709,935	3%
2006	3,678,295	-1%
2007	2,143,401	-42%
2008	886,755	-59%
2009	179,579	-80%
3Q-2010	-1,448,503	-907%
Note:	Absorption is average based of source data.	on
Sources:	CB Richard Ellis, Xceligent, Cassidy Turley, Colliers, Nash Commercial, Grubb & Ellis, ar Randall Gross/Development E	nd

Absorption was also analyzed in terms of five-year moving averages since 1996. The overall "average of averages" places annual absorption at 2.1 million square feet. In this context, there was a period of declining (but still positive) annual average absorption between 1997 and 2005. During the period from 2005 to 2008, there was increasing absorption. This trend once again reversed and the market has seen declining absorption since the 2004-08 period. Overall, absorption has fallen by 49% on a five-year moving average basis during the

2006 to 2010 period.

Period	Ave. Absorption	Change
96-00	3,050,600	
97-01	2,873,500	-6%
98-02	2,390,000	-17%
99-03	1,620,250	-32%
00-04	1,405,463	-13%
01-05	1,307,400	-7%
02-06	1,932,659	48%
03-07	2,707,339	40%
04-08	2,804,440	4%
05-09	2,119,593	-24%
06-10	1,087,905	-49%
Ave/Ave	2,118,105	

Table 16.INDUSTRIAL ABSORPTION5-YEAR MOVING AVERAGE.NASHVILLE MARKET, 1996-2010

Source: Randall Gross / Development Economics.

Sub-Markets. Absorption was further analyzed by sub-market. Between 2004 and 3rd Quarter 2010, absorption totaled nearly 4.7 million square feet in the East sub-market, which has seen the highest take up in occupancy. Again, demand in this sub-market (which includes Wilson County) has been driven by highway-oriented cube distribution to serve the huge east-west I-40 corridor. The North sub-market saw positive absorption of nearly 1.8 million square feet over this period. The IBD sub-market also saw positive net absorption of about 612,000 square feet, again remarkable given that this sub-market mainly includes space in older, inner-city industrial areas such as those along 4th Avenue South and Nolensville Pike inside of I-440. Finally, the Southwest sub-market also saw positive net absorption, of about 673,000 square feet during this period.

By contrast, the Southeast sub-market (past I-440) into Lavergne, Smyrna, and Murfreesboro, saw a negative net absorption of more than 1.8 million square feet since 2004. This is a worrying development given the size and importance of this sub-market to the overall health of the region's industrial market. The Southeast sub-market saw a decrease in absorption during 2006 and again in 2009 and to-date in 2010. Most of this negative absorption has occurred in the 2009-10 period.

Sub-Market	2004	2005	2006	2007	2008	2009	3'2010	TOTAL
ICBD	-239,218	N/A	513,470	554,443	-79,913	-241,927	104,742	611,597
North	-33,833	N/A	1,667,140	403,235	-196,095	268,911	-343,015	1,766,343
Southwest	117,683	N/A	-69,847	346,513	-90,369	384,225	-15,396	672,809
Southeast	627,817	N/A	-414,530	650,032	396,474	-1,483,943	-1,596,123	-1,820,273
East	942,755	N/A	971,942	86,763	1,171,872	585,472	934,614	4,693,418
West	-22,258	N/A	250,915	-82,284	-63,705	99,500	-533,325	-351,157

Table 17. INDUSTRIAL ABSORPTION TRENDS BY SUB-MARKET, NASHVILLE MARKET, 2004-2010 (Q3)

Notes: N/A means full sub-market data not available. Data based on samples.

Sources: Xceligent, Grubb & Ellis, Nashville Commercial, and Randall Gross / Development Economics.

The East sub-market has held an 84.2% share of overall industrial market absorption since 2004, followed by the North sub-market with a 31.7% share.

Sub-Market	2004-2010 Absorption (Square Feet)				
	Total	Ave Annual	Share		
ICBD	611,597	62,728	11.0%		
North	1,766,343	181,163	31.7%		
Southwest	672,809	69,006	12.1%		
Southeast	-1,820,273	-186,695	-32.7%		
East	4,693,418	481,376	84.2%		
West	-351,157	-36,016	-6.3%		
TOTAL	5,572,737	571,563	100.0%		

Table 18. INDUSTRIAL ABSORPTION BY SUB-MARKET AND SHARE, NASHVILLE MARKET, 2004-2010 (Q3)

Sources: Xcelligent, Grubb & Ellis, Nashville Commercial and Randall Gross / Development Economics.

Industrial Demand Forecasts

Overall market-wide industrial demand was forecasted based on analysis of several factors including among others absorption patterns and trends; industrial employment patterns and projections; and regional competitiveness for specific industries. Demand forecasts are summarized below based on these analyses.

Absorption-Based Forecasts

An analysis of historic absorption patterns and trends provided one input for forecasting future absorption. Absorption patterns help provide an understanding of the local market cycle and, in comparison with national trends, an understanding of the local market reaction to national and international economic cycles. Between 2010 and 2015, it is anticipated that the Nashville market will conservatively see overall industrial absorption of 1.2 million square feet. Between 2015 and 2020, absorption should increase to 1.5 million square feet, for a total of 1.7 million square feet over the ten-year period.

Table 19.	INDUSTRIAL ABSORPTION
	FORECASTS, NASHVILLE MARKET
	AND SUB-MARKETS, 2010-2020

Area	2010-2015	2015-2020
Nashville Area Market Sub-Markets	1,310,400	1,507,000
ICBD	97,100	55,800
North	294,900	322,400
Southwest	141,300	162,500
Southeast	-117,000	-93,700
East	888,600	1,053,600
West	5,600	6,400
Source:	Randall Gross /	

Development Economics.

Absorption was also forecasted by sub-market, with the East sub-market leading with about 1.9 to 2.0 million square feet by 2020, followed by the North sub-market and ICBD.

Employment-Based Forecasts

Absorption was also forecasted based on industrial employment projections and economic forecasts for the region. Using employment projections, industrial absorption would total 1.6 million between 2010 and 2015, increasing to 2.7 million between 2015 and 2020.

Sub-Market	2010-15	2015-20	
ICBD	118,400	245,700	
North	342,100	709,700	
Southwest	172,500	305,600	
Southeast	-158,600	-34,500	
East	1,117,900	2,060,400	
West	6,800	78,600	
TOTAL	1,599,100	2,673,600	
Source:	Randall Gross / Development Economics.		

Table 20. EMPLOYMENT-BASED INDUSTRIAL ABSORPTION FORECASTS, NASHVILLE MARKET, 2010-2020

Again, the East sub-market is expected to lead absorption, with about 3.1 million square feet over the ten-year period, followed by the North and IBD sub-markets. Based on these projections, market demand is forecasted as follows:

North295,000 - 340,000322,000 - 700,00Southwest140,000 - 172,000165,000 - 300,00	Sub-Market	2010-2015	2015-2020		
	North Southwest Southeast East	295,000 - 340,000 140,000 - 172,000 -117,000 - 160,000 890,000 - 1,100,000	55,000 - 245,000 322,000 - 700,000 165,000 - 300,000 - 35,00090,000 1,000,000-2,000,000 6,000 - 80,000		

Competitive Industrial Areas

In order to determine the Study Area's capture of the sub-market demand, competitive industrial areas were examined and the relative competitive advantages of the Study Area assessed. A brief summary of several of the more competitive industrial zones is described below.



Map Source: Metro Nashville Planning

• Four-Forty Business Center III, IV, V (Melrose Avenue). This office/distribution complex is located just outside of the study area on Melrose Avenue. The complex, started in 1998, includes 439,718 square feet in four buildings. About 6.3% of the space (27,800 square feet) was available in 2010. The buildings generally offer 18 to 26--foot clear, sprinkled, and column-free (or wide) space with concrete tilt-wall construction. The project is marketed as being located in the "Woodbine" area and tenants include UPS, contractor offices, light manufacturing, and distribution. The project offers direct access to I-440.



Photo Sources: Duke Realty

Sidco Drive. Located just on the other side of the rail lines off of Thompson Lane is the fully-developed Sidco Drive industrial area. This district has a number of owner-built and single-owner occupied buildings, although there are also multi-tenant flex building located throughout the park. The area has a total estimated 850,000 square feet of industrial building stock and about 10% vacancy. Buildings tend to be older, 1960s/70s through recent construction. Multi-tenant space leases in the \$6.00 range Triple Net and typically offers 14 to 18-foot ceilings and 30x30 column spacing. Sale prices start around \$50 per square foot. Space is marketed as being close to 100 Oaks and Downtown. Sample tenants include Nashville Sash & Door, Mr. T's Patio Furniture, Tennessee Emergency Management Agency, Fabric House, Lesco Service Center, Light Loads (moving service), ReCreations Furniture, and others.



Photo Source: LoopNet

- Fesslers Lane Business Center. Fessler's Lane Business Center is located just east of the study area, adjacent to Woodycrest. The area's tenants include companies like Delta Stage Lighting, Blackwoods Trailer Repair, National Toxicology Specialists, Neely Coble Company, and Glass Doctors. Fessler's Lane offers highway and rail access, and is marketed as being close to the interstate system, downtown, and the airport. The study area's Interstate Boulevard industrial area is located adjacent.
- Others. Other key competitive industrial nodes include the following:
 - Linbar Business Center
 - Willow Trace Centre II
 - Cowan Industrial Park
 - Centre Point Distribution Park
 - SouthPark Distribution Center
 - Metroplex Business Park
 - Bakertown Industrial
 - Harding Industrial Park
 - Haywood Oaks II, III, IV

- Pin Oaks Business Center I & II
- Space Park South
- Tech Park 24
- I-24 Distribution Center I, II
- Mid South Logistics I, II, III, IV, V, VI
- Three Oaks Industrial Park I, II
- Brentwood South Business Center I, II, III, IV, V, VI
- Aspen Grove I, II, III, V
- Powell Place Business Park
- Aspen Grove Flex Center I, II, III, IV
- Grassmere Park II
- Hamilton Business Center

Study Area Industrial Potentials

Industrial development potentials were forecasted for the Study Area and adjoining sites through 2020. These potentials were determined based on the Study Area capture of industrial demand within the three sub-markets in which it is located, namely the ICBD, Southwest, and Southeast sub-markets. In the case of industrial use, potentials were determined not only for sites and buildings along the Nolensville Pike Corridor but also within the several blocks adjoining the corridor on either side. Potential was determined for use of existing vacant buildings as well as for development of new industrial space or redevelopment of existing space

Table 21.	INDUSTRIAL DEMAND FORECAST, NOLENSVILLE PIKE AREA, 2010- 2020				
Source	2010-15	2015-20			
ICBD	76,300	112,500			
Southwest	85,800	123,200			
Southeast	20,800	15,600			
TOTAL	182,900	251,300			
Source:	Randall Gross/ Development Economics.				

Overall, potential for about 180,000 to 185,000 square feet of industrial use is forecasted for the Study Area through 2015, and another 250,000 to 255,000 square feet during the period from 2015 to 2020. Thus, there is potential for 430,000 to 440,000 square feet of net additional industrial use in the Study

Area over the next ten years through 2020. Given that 7% of the existing space (or about 40,000 square feet) along the corridor is currently vacant (plus another 47,000 estimated square feet in adjoining streets), there is <u>net</u> potential for about **340,000 to 350,000 square feet** by 2020.

Business Retention & Growth Opportunities

As noted earlier, this Study Area remains competitive for businesses that prefer to be centrally-located within the region, often for local and intra-regional distribution purposes. Access to the Interstate system at I-440, I-65, and (not far away) I-24, has helped the area retain a relatively substantial share of its industrial uses despite some long-term physical and socio-economic decay, topographical constraints, and competitive suburban development. As the region's market base has grown, so have the number of businesses that serve that market. In particular, food producers and distributors, testing services, catering services, contractors, repair & maintenance services, specialty building products, printers, and other businesses that serve the local and MSA market will continue to be attracted to this area.

A variety of other small and medium-sized businesses will locate in the Nolensville Pike area because of the accessibility but also because of the availability of right-sized buildings. The area has a fairly-substantial stock of multi-tenant and single-tenant office/warehouse buildings in the 10,000 to 30,000 square-foot range, which hits the lower/middle of the market for expanding or relocating companies. Low-profile businesses that do not require the amenities of a high-end business park yet desire a location near downtown and the interstate system will locate in areas near Nolensville Pike.

There are also growing numbers of emerging specialty businesses such as those engaged in various forms of "artisan industrial" or craftwork which are drawn to older industrial buildings and mixed-use areas such as those located near 4th Avenue South. Artisan industrial includes companies like Grooms Engine, whose craftsmen re-manufacture individualized engines by hand. Companies that make artisanal foods and beverages, or hand-made and specially-designed furniture and building components like windows, doors, ironwork, etc also find their way into these types of locations and often share space with architects' offices or web designer's spaces. Other emerging specialty businesses include companies that specialize in "green" products for building, home, transport, and other uses. An example of a green manufacturer that has relocated to Nashville and selected Nolensville Pike for its operations is eGo Vehicles, an electric bicycle manufacturer. To summarize, the key opportunities are likely to include:

- Food & beverage manufacturers, including artisanal products
- Repair services (vehicle, equipment, appliance, elevator, etc)
- Maintenance companies

- Testing services
- Catering and food delivery services
- Building products & wholesale showrooms
- Building contractors/trades
- Restaurant supplies
- Craft/hand-made products
- Wood & metal furniture
- Machinery and industrial equipment
- Cleaning supplies
- Maintenance companies
- Printing, signmaking, etc.
- Green products
- Other low-profile companies that desire an Interstate-accessible, central location.

Locations for Industrial Uses

Most of the demand would be generated from within the ICBD and Southwest sub-markets and the industrial use is most likely to locate in areas with good access to I-440. There is only a very limited number of small companies today that are looking for railside access, so proximity to rail is not the primary location factor. The most competitive locations for industrial use in the corridor are north and south within 0.5-miles of the I-440 on-ramp. The west side of Nolensville Pike tends to be more attractive for industrial because there is already an agglomeration of industrial uses and zoning in the area and new industries there are less likely to abut residential neighborhoods than they would on the east side. However, there are a number of small nodes where conditions could be improved in order to enhance their overall marketability for retaining existing and attracting new industrial uses.

Retention and Redevelopment Opportunity Nodes. There are several existing and potential new nodes appropriate for industrial uses, with appropriate infrastructure interventions to enhance their marketability. However, it should be noted that the "industrial" category can be defined to include a wide variety of uses and each of these nodes is competitive for certain types of industrial and (in some cases) mixed-use activity. Key nodes are defined below and specific (re)development concepts, projects, and strategies for these nodes are described in more detail in the Volume 1 Report.



Map Source: Metro Nashville Planning

- 4th Avenue South. The northern portion of this corridor (between I-65 and Chestnut Street) has an agglomeration of <u>small industrial service</u>, <u>building</u> <u>supply</u>, <u>contractors</u>, <u>auto</u> <u>service</u>, <u>and</u> <u>other</u> <u>businesses</u> generally operating out of attached 3,000 to 5,000 square-foot units.
- Chestnut Square Area. May Hosiery Mill and other historic buildings around Chestnut and Houston Streets near Fort Negley are emerging as an eclectic "artisan industrial district," with a mix of craft industrial, professional design office, and non-profit uses. Older buildings near the intersection of Chestnut and 4th Avenue South contain artisan industrial uses such as restored wood flooring and hand-crafted furniture.
- Hart Street Industrial Triangle. There is an existing industrial zone bounded roughly by 4th Avenue South/Nolensville Pike (west), Woodycrest Avenue (south), and the railroad (east). Several large businesses, such as Grooms Engine and Dyke Industries, have recently located here or nearby. There is also new construction underway. This industrial zone

continues east into the Fessler's Lane Business Area. This area benefitted early from the presence of the railroads and then from its highway-accessible location, with I-65 (Inner Loop) not far to the north, I-440 to the south, I-24 to the east and I-65 South to the west.

- **Rosedale Industrial Area**. This area has poor definition as an industrial node. Located on the west side of Nolensville Pike near Rosedale Avenue, there is new office/warehouse construction underway at 108 Nolensville Pike as well as one of the largest vacant/underutilized sites in the study area, at Napoleon Avenue.
- Melrose Triangle / Central Avenue. The triangle formed from Melrose south to Thompson Lane (south), Nolensville Pike (east), and the railroads (west) provides an opportunity for upgrading and perhaps transition to a mixed-use zone of commercial/industrial uses. for increasing the competitiveness of an existing industrial area.
- Allied Drive. This existing industrial area was developed according to plan and has retained a set of larger single-tenant industrial uses and remains fairly attractive as an industrial location despite the aging of its space and its lack of direct Interstate highway access. Existing uses include Tennessee Valley Fireplace, Five Star Food Service, Sabre Defence Industries, Falcon Fabricators, Harlan Electric, and others.

Summary

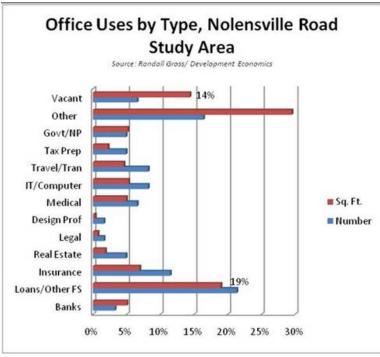
This industrial market analysis identified potential for at least 250,000 square feet of net new industrial space over the next ten to 20 years. The mix of uses varies from industrial service and "artisan industrial" in the Chestnut Street area to larger single-site manufacturers like Grooms Engine and Dyke Industries further south towards I-440. Most of the industrial land in the study area's six to eight industrial areas is occupied, but there is under-utilized land especially around the Rosedale area. The study area remains competitive for industrial uses mainly because of its central location and access to I-440, which allows for regional distribution to serve a local market but also to access the interstate system for reaching broader markets.

Section 4. OFFICE MARKET ANALYSIS

The findings from an office market potentials analysis for the Study Area are summarized in this section. The study area has relatively little existing office space and Nolensville Pike is not a major office corridor. In fact, Nolensville Pike itself is not among the recognized office sub-markets designated by the major commercial brokerage houses. Nevertheless, there are some individual offices located in the area and there is flex office/warehouse development that accommodates a mix of offices and warehousing. Further, part of the study area lies just south of Nashville's central business district, which is expanding southward. Access to downtown, nearby institutions, growing consumer markets, and major commuter routes suggest that there are opportunities for additional office use in the area.

Inventory

There are 61 uses categorized as "office" within the study area, and a total of about 175,000 square feet of purpose-built office space. Office uses include primarily financial services, with loan agencies comprising 21% of all office use in the area and banks 3%. Other office uses include a large Orkin (exterminators) office and the Tennessee Crop Improvement Association, plus insurance



brokers, foreign travel & transportation agencies, and other consumeroriented office tenants.

A relatively high 14% of the study area's office space is vacant, including a 14,000 square-foot building that is under consideration to house a local non-profit agency.

Many of the area's office tenants, including lawyers, non-profits, tax preparers, computer repair, travel agents, medical professionals,

loan agencies, and insurance brokers serve a foreign-language (often Spanish - speaking) clientele.



There are three or four purpose-built office buildings in the corridor with more than 3,000 square feet. One of these buildings is vacant (as described above), another houses a non-profit agency serving the Sudanese community and several small companies, while another houses computer repair specialists and business services. The first phase of a new flex-office development was recently completed that houses a few supply businesses but is mostly for rent. A second phase is under development behind this building.

Office-Related Employment Trends

Trends in office-related industries were examined as a basis for assessing current and future demand for office space in the study area. The key officerelated sectors include finance and insurance, real estate, professional and technical services, management services, and medical professionals (excluding hospitals).

Nashville MSA Office-Related Industry Trends

In 2008, the Nashville Metropolitan Statistical Area (MSA) had a total of 127,925 private jobs within these sectors. This number represents an increase of 32,495 or 34.1% since 1998. Thus, overall employment in office-related sectors has been growing, spurring demand for office space to house these workers. Of course, there has also been concurrent growth in the number of home offices and alternative spaces to accommodate such businesses. Even so, most office workers are still housed in office buildings.

Randall Gross / Development Economics

Table 22.		IASHVILLE MSA, 1998-2008				
			1998-2008	1998-2008 Change		
Selected Industry	1998	2008	Number	Percent		
Finance/Insurance 1/	20,294	21,366	1,072	5.3%		
Real Estate	10,911	12,149	1,238	11.3%		
Prof/Technical Svcs	26,305	43,386	17,081	64.9%		
Management Svcs 2/	17,500	27,911	10,411	59.5%		
Medical Offices 3/	20,420	23,113	2,694	13.2%		
TOTAL	95,430	127,925	32,495	34.1%		
Notes:	1/ Excludes Banks	s/lending institutior	ns.			
	2/ E.g., Corporate Offices.					
	3/ Excludes Hospitals and Clinics.					
Sources:	US Bureau of the	Census and Rand	all Gross /			
	Development Economics.					

Table 22. EMPLOYMENT TRENDS IN OFFICE-FOCUSED INDUSTRIES.

The largest numbers of Nashville MSA office workers are found in professional & technical professions (such as architects, engineers, scientists, computer programmers, web designers, etc). This industry also represents the fastest growing sector, growing by nearly two-thirds and adding more 17,000 office workers since 1998. Management Services, including corporate offices, was the second-fastest growth sector at 59.5%, adding more than 10,400 jobs. Slower but still positive growth was seen in finance, insurance, real estate, and medical professionals.

Nashville-Davidson Trends

Before Nashville was "Music City," it was known as the "Athens of the South" but also the "Wall Street of the South," because of its many banks, insurance companies, and investment houses. The city was once headquarters to several large regional banks and savings & loan institutions including First American Bancorp, Commerce Union Bank, Third National Bank, Metropolitan Federal Savings & Loan, and others. The city was also home to J.C. Bradford Company, which was one of the country's oldest and largest regional brokerage houses outside of New York. National Life & Accident Insurance Company / NLT (now American General) and Life & Casualty Insurance were both based in Nashville and contributed several of the city's earliest skyscrapers.

Nashville's music industry owes much to the city's financial sector, since National Life owned clear-channel broadcast station WSM ("We Shield Millions") and housed the radio studio. Much of affluent Belle Meade was built in the 1920s for Nashville's bankers and wealthy financiers.

The advent of interstate banking legislation effectively ended Nashville's predominance in the regional banking industry as out-of-state banks entered the market and swallowed the city's large and very profitable institutions. Nashville's big insurers also became subsidiaries of out-of-town companies with less commitment to Nashville as an operating base. Today, Nashville has a large but shrinking financial and insurance sector, having lost about 2,200 jobs since 1998 even before the current financial crisis and economic downturn. Surprisingly, Nashville also lost about 900 jobs in real estate, despite booming property sales and substantive household growth between 1998 and 2008.

	1998-2008 Change							
Selected Industry	1998	1998 2008 Number		Percent				
Finance/Insurance /1	14,537	12,330	-2,207	-15.2%				
Real Estate	7,268	6,400	-868	-11.9%				
Prof/Technical Svcs	18,714	26,181	7,467 39.9%					
Management Svcs 2/	16,235 17,502 1,267							
Medical Offices 3/	9,784 12,825 3,041							
TOTAL	66,538 75,238 8,700 1							
Notes:	1/ Excludes banks/lending institutions.							
	2/ E.g., Corporate Offices.							
	3/ Excludes Hospitals and Clinics.							
Sources:	US Bureau of	the Census a	nd Randall Gross	/				
Development Economics.								

Table 23.EMPLOYMENT TRENDS IN OFFICE-FOCUSEDINDUSTRIES, NASHVILLE-DAVIDSON, 1998-2008

Nashville's office-related growth has been focused in the professional and technical services sector, along with medical offices. The former now dominates Nashville's office-related employment, with more than 26,000 people employed in professional and technical services. Another 17,500 are employed in management services and 12,800 in medical services (other than hospitals). About 12,300 were employed in finance and insurance, and 6,400 in real estate, as of 2008.

The health care industry has grown to dominate Nashville's office market not just in terms of local medical professional offices but also corporate offices of major health care companies like Hospital Corporation of America (HCA) and others. Many of the technical and professional services occupying office space also have ties to the health care industry. Overall, Nashville has become a national center for the industry. A public-private partnership is developing a medical trade mart on the site of the existing convention center downtown, which will help to solidify Nashville's reputation as a health care capital.

Where the city may be lacking in this regard is in medical research and in development of new products to manufacture. Unlike competing cities like Raleigh-Durham, Nashville does not as yet have a major R&D park or medical research office development. Despite Vanderbilt University's (and other area institutions') excellent reputation for in-house medical research, the city lacks a cluster of commercial R&D activity and spin-off.

Fu

South/East Nashville Office Employment



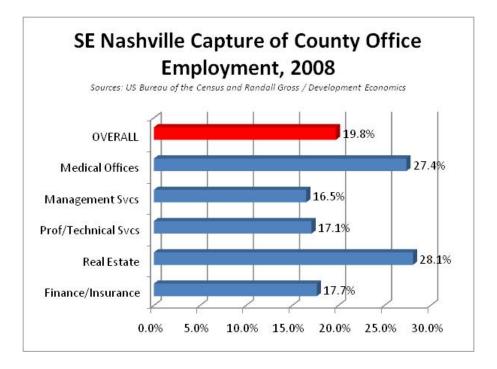
Further analysis was conducted specifically on office-related employment within the south/east Nashville area, comprising zip codes 37210, 37211, 37204, and 37220, which is generally bound by 12th Avenue South (west), Bell Road (south), I-24 (east) and I-65 (north). Key highway and interstate corridors within this area include I-65 South, Nolensville Pike, Murfreesboro Road, and I-24 east.

Map Source: Metro Nashville Planning

This analysis found that in 2008 there were nearly 15,000 office-related jobs in the area. Many of these jobs were concentrated in zip code 37211, which hugs the Nolensville Pike corridor but extends further south of the study area to include Southern Hills Hospital and surrounding uses. Again, the largest share of employment is in professional and technical services. But there are also substantial numbers of jobs in medical services, management, and finance and insurance. Overall 2008 office employment within this area is summarized in the following table by industry sector.

Table 24. OFFICE EMPLOYMENT IN SOUTH/EAST NASHVILLE BY ZIP CODE, 2008

Industry	37210	37211	37204	37220	TOTAL				
Finance/Insurance 1/	99 1,825 226 31 2,								
Real Estate	771	731	252	47	1,799				
Prof/Technical Svcs	776	2,518	1,116	69	4,478				
Management Svcs 2/	542	1,147	1,204	-	2,893				
Medical Offices 3/	741	2,335	331	107	3,514				
TOTAL	2,928 8,554 3,128 253 14,864								
Notes:	 1/ Excludes Banks/lending institutions. 2/ E.g., Corporate Offices. 3/ Excludes Hospitals and Clinics. Area generally bounded by 12th Ave, So (west), Bell Road (south), I-24 (east), and I-65 (north). 								
Sources:	US Bureau of the Census and Randall Gross / Development Economics.								



This southeast Nashville area captured about 20% of total Nashville-Davidson office employment in 2008. However, it captured more than its fair share of medical offices and real estate. Both of these industries are largely

Randall Gross / Development Economics

consumer-oriented (serving a household-based market), and southeast Nashville has a large household base. By comparison, the area has not attracted its "fair share" of management, professional/technical, finance or insurance employment. These industries tend to be concentrated more in the CBD and southwest Nashville such as in the West End/Hillsboro Corridors.

Office Market Trends

The overall office real estate market was examined in terms of existing conditions and trends in inventory, occupancy/vacancy, tenant mix, rents and other factors. The market area, along with conditions and trends, are described below.

Market Area & Sub-Markets

Nashville office brokers have disaggregated the market into eight submarkets, including Airport North & Airport South, Brentwood/Cool Springs (now

often separated into two submarkets). Central Business District, Green Hills/Music Row, Metro Center, North Nashville, and West End/Belle Meade. As noted previously. the Nolensville Pike Corridor is not considered a core office node with enough activity to qualify as a sub-market. Largely by default, the area falls within the boundaries of the "Airport South" sub-market even though few would consider Nolensville Pike as a location for airportrelated office space. As such, it is also important to consider trends in nearby inner-city submarkets like the CBD, Metro Center, and the Music Row areas as they do bear more similarities (as successful innercity locations) to a potential office market in Nolensville Pike.



Map Source: Metro Nashville Planning

Inventory

Table 25.

The Nashville office market had a total of about 33 million square feet of tracked office space in 3rd Quarter 2010. The CBD has about 8.0 million square feet but no longer comprises the largest office sub-market. Brentwood and Cool Springs have nearly 10.8 million square feet, together the largest office node in the region. The two Airport sub-markets had a total of about 7.1 million square feet. West End/Belle Meade has almost 3.8 million square feet, including the "Midtown" area that has become a high-density office node outside of downtown.

SUMMARY OFFICE MARKET CONDITIONS, NASHVILLE MARKET,

						Under
Sub-Market	Total	Vacant	Vac. Rate	Ren	tal Rate	Constr.
Airport North	4,406,036	506,694	11.5%	\$	18.70	-
Airport South	2,720,063	650,095	23.9%	\$	11.61	-
Brentwood/Cool Springs	10,774,368	513,152	4.8%	\$	20.73	-
CBD	8,038,965	1,744,455	21.7%	\$	20.28	-
Green Hills/M Row	1,995,635	649,011	32.5%	\$	22.62	-
Metro Center	1,386,081	173,620	12.5%	\$	22.70	-
North Nashville	435,432	95,640	22.0%	\$	15.97	101,510
West End/Belle Meade	3,790,541	84,909	2.2%	\$	17.40	-
TOTAL	33,547,121	4,417,577	13.2%	\$	22.49	101,510

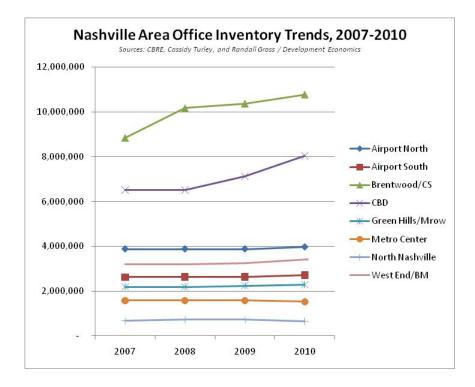
3RD QUARTER, 2010

Sources:

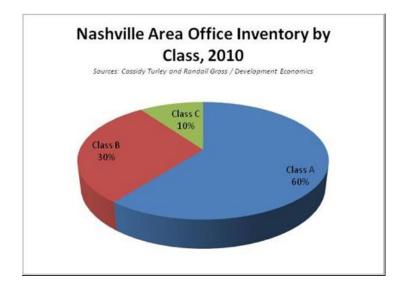
Cassidy Turley and Randall Gross / Development Economics.

Overall inventory has increased by almost 4.0 million square feet since 2007, or nearly 1.0 million square feet per year. By far the most rapid growth has been in Brentwood-Cool Springs, which has attracted large corporate offices, most notably the new 450,000 square-foot North American headquarters for Nissan. However, Nissan's move emptied 280,000 square feet of space it temporarily occupied downtown. A 255,000 square-foot office for Healthways was also developed in the Cool Springs area, along with 180,000 square feet for Verizon Wireless, 153,000sf for Axa Equitable Life, 125,000sf for IRS, and 100,000sf for PICA. HealthSpring is adding 170,000 square feet in Metro Center.

The CBD has increased its inventory by more than 1.5 million square feet, with a large share (more than 500,000 square feet) in the new Pinnacle at Symphony Place office high-rise, new home to law firm Bass, Berry & Sims as well as Pinnacle Financial.

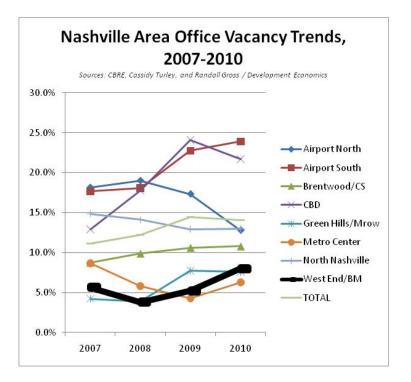


The Nashville market is dominated by Class A space, which constitutes about 60% of the existing inventory. Class B space, which is generally older and lacks certain amenities comprises 30% of the space. Class C space comprises only 10% of the active inventory. However, there are a number of smaller, singletenant Class C buildings with less than 5,000 square feet that are not included in the inventory.



Vacancy

Not surprisingly, the addition of new office space at the cusp of an economic downturn, especially one involving a banking crisis, led to sharply increased vacancy rates downtown and elsewhere. There was a total of about 4.4 million square feet of vacant space in 3rd Quarter 2010, yielding a vacancy rate of 13.2%. Market vacancy had increased from 11.1% in 2007 to more than 14% by early 2010, before subsiding late in the year. CBD vacancy increased from 12.9% to more than 24% in 2009, before falling back to 21% in mid 2010. In general, vacancy rates are falling and the market appears to be recovering towards the end of 2010. Suburban areas did not see the volume of over-building that would have caused a severe over-hang in the market, so empty space is filling up as the economy gradually rebounds. In fact, there is some fear that the lack of large contiguous blocks of available office space will prevent the region from attracting more corporate offices. Certainly there is available space in the CBD, but even there the market is already tightening. Overall vacancy trends and trends by sub-market are illustrated in the chart that follows.



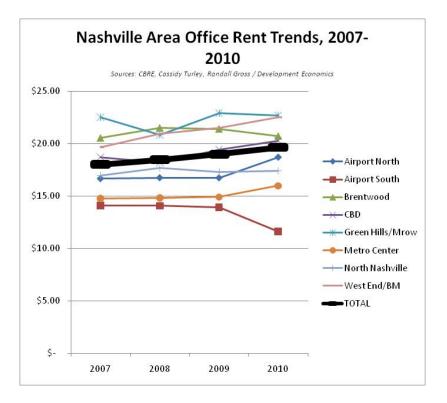
Nashville has benefitted from corporate relocations, with the region counted among the more successful nationwide in attracting corporate offices. However, the mainstay of growth in the market is and will continue to be expansion of small businesses and move-ups, such as from Class C to B and from Class B to A. While occupancies appear to be once again increasing in many parts of the market, the Airport South sub-market (of which the study area is a part) appears to have continued downward. Vacancy rates in this sub-market

increased from 17.7% in 2007 to 22.7% by 2009, but increased again to 23.9% in early 2010 where they remained by the 3rd Quarter. As such, this sub-market has the highest vacancy in the region, higher even than the CBD.

Rents

Office rents averaged \$22.49 per square foot in 3rd Quarter 2010. The highest rents were in Metro Center and Green Hills, with the lowest rents in the Airport South sub-market (\$11.61) where the study area is located. The combination of low rents and high vacancy would not normally bode well for the sub-market overall as an investment opportunity because financial returns are comparatively low. However, there is the opportunity to realign Nolensville Pike with Music Row, Metro Center, and other nearby inner-city sub-markets, or to create a new sub-market through development of Nolensville Pike as a stronger office/business node with its own identity separate and apart from Airport South. In order to succeed as an office node, however, the physical and business environment in Nolensville Pike would need to be improved so as to compete with nodes such as Green Hills/Music Row and Metro Center.

Overall trends have seen local market rents increasing by 9.0% since 2007, despite economic recession and financial crisis. Rents increased between 2007 and 2010 in all sub-markets except for Airport South, where they have fallen by 17.5%. The most rapid rental increases have been in West End (14.4%) and Airport North (12.3%). Again, falling rents suggest that the Airport South sub-market is under-performing financially.



Construction

A total of 11.5 million square feet of office space has been built in the Nashville market since 1996, for a total of about 823,000 square feet per year. Construction peaked during the 1998 to 2000 period and again from 2007 to 2008. As of 3rd Quarter, more than 500,000 square feet had been delivered in the Nashville market in 2010.

Table 26.	OFFICE CONSTRUCTION TRENDS, NASHVILLE MARKET, 1996-2010
Year	Completions (SF)
1996	500,000
1997	550,000
1998	1,250,000
1999	1,255,000
2000	1,275,000
2001	490,000
2002	220,000
2003	100,000
2004	230,000
2005	675,000
2006	799,000
2007	1,375,000
2008	1,385,000
2009	915,000
2010 (Q3)	504,000
TOTAL	11,523,000
Ave/Yr	823,100
Sources:	CB Richard Ellis and Randall Gross / Development Economics.

Absorption Trends

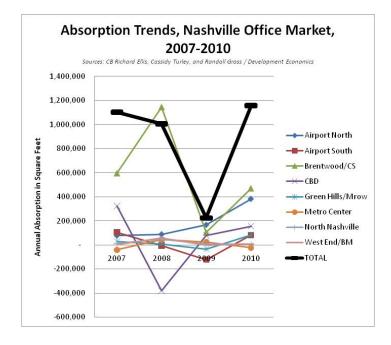
Office absorption totaled 3,487,000 square feet between 2007 and 2010 (to date), for an annualized average of nearly 930,000 square feet. The Brentwood/Cool Springs sub-market has captured the lion's share (66.4%) of this absorption, with 2.3 million or 617,000 square feet per year. Airport North has

captured 20.4% or about 190,000 square feet per year. The CBD has about 5% of the market, with average annual absorption of 47,000 square feet. Airport South is the second smallest of the sub-markets in terms of absorption, with 15,400 square feet per year or about 1.7% of the market.

Sub-Market	2007-2010 Absorption (Square Feet)			
	Total	Total Ave Annual		
Airport North	711,381	189,702	20.4%	
Airport South	57,835	15,423	1.7%	
Brentwood/CS	2,314,701	617,254	66.4%	
CBD	176,508	47,069	5.1%	
Green Hills/Mrow	84,244	22,465	2.4%	
Metro Center	3,247	866	0.1%	
North Nashville	72,295	19,279	2.1%	
West End/BM	66,730	17,795	1.9%	
TOTAL	3,486,943	929,852	100.0%	
Sources:	CB Richard Ellis, Cassidy Turley, and			
	Randall Gross / Development Economics.			

Table 27. OFFICE ABSORPTION BY SUB-MARKET AND SHARE, NASHVILLE MARKET, 2007-2010

Absorption fell precipitously in 2009 before recovering in 2010, as illustrated in the following chart.



Randall Gross / Development Economics

Much of the market's absorption trend mirrors activity in Brentwood-Cool Springs, which currently dominates market activity. CBD absorption reached its lowest point in 2008, but recovered in 2009 and 2010. Airport South absorption fell through 2009 but also recovered somewhat in 2010. These trends are detailed in Appendix Table 2.

Looking back at the long-term trend, the market has absorbed 10.2 million square feet of office use since 1996, for an average of about 692,000 square feet per year. The market saw increasing absorption from 1996 to 1999, when there was a slight decrease but still positive change, which accelerated in 2000. The market then decelerated once again through 2003, including negative net absorption in 2002. The most recent cycle saw a decrease, but still positive absorption in 2008 and 2009, as noted before. The rate of market return in 2010 is the fastest since 2000, with an annualized absorption of 1,157,000 square feet.

Table 28.	OFFICE ABSORPTION TRENDS,		
	NASHVILLE MARKET, 1996-2010		

Year	Square Feet	Change
1996	600,000	
1997	900,000	50%
1998	1,150,000	28%
1999	590,000	-49%
2000	1,350,000	129%
2001	150,000	-89%
2002	-125,000	-183%
2003	105,000	-184%
2004	650,000	519%
2005	700,000	8%
2006	950,000	36%
2007	1,100,000	16%
2008	1,000,000	-9%
2009	220,000	-78%
3Q-2010	868,000	295%
TOTAL	10,208,000	
Average/Year	692,068	
Note:	Absorption is average based on source data.	
Sources:	CB Richard Ellis and Randall Gross / Development Ec	onomics.

Five-Year Moving Average. The market cycles are fairly well-defined, based on five-year moving averages. A down cycle from 1996 through 2003 was reversed in the 2000 to 2004 period. The down cycle returned for the 2001-05 period, but 2002 through 2008 saw sustained growth until the next down cycle in 2005-09. So far, the 2006-10 period has seen positive absorption.

Table 29.	5-YEAR MOVING AVERAGE. NASHVILLE MARKET, 1996- 2010			
Period	Ave Absorption	Change		
96-00	918,000			
97-01	828,000	-10%		
98-02	623,000	-25%		
99-03	414,000	-34%		
00-04	426,000	3%		
01-05	296,000	-31%		
02-06	456,000	54%		
03-07	701,000	54%		
04-08	880,000	26%		
05-09	794,000	-10%		
06-10	827,600	4%		
Ave/Ave	651,000			

Source:	Randall Gross / Development		
	Economics.		

Overall, the "average of averages" comes to **651,000 square feet** per fiveyear period since 1996, similar to the overall baseline average of about 692,000 square feet per year. However, since 2005, moving average absorption has been 810,800 square feet per five-year period.

Office Demand Forecasts

Office demand was forecasted through 2020 for the Nashville market based on a number of factors, including historic absorption patterns and trends, office employment trends and projections, tenant movements, competitive market advantages, and others.

Absorption Forecasts

Office absorption was forecasted based on trends, moving averages, national/regional corporate movements, and other considerations. Based on these factors, the Nashville office market is forecasted to absorb about 830,000 square feet between 2010 and 2015, followed by absorption of about 650,000 during the 2015 to 2020 period.

Table 30.	OFFICE ABSORPTION			
	FORECASTS, NASHVI	FORECASTS, NASHVILLE MARKET		
	AND SUB-MARKETS,	2010-2020		
Area	2010-2015	2015-2020		

Nashville Area Market	831,200	650,500
Sub-Markets		
Airport North	93,300	73,000
Airport South	13,800	10,800
Brentwood/Cool Sprgs	540,700	423,200
CBD	46,300	36,200
Green Hills/Music Row	30,100	23,600
Metro Center	800	600
North Nashville	19,000	14,800
West End/BM	87,500	68,500
Source:	Randall Gross /	

Development Economics.

Brentwood and Cool Springs will continue to see the largest share of absorption, at 540,000 square feet by 2015 and another 432,000 by 2020. The Airport North and West End sub-markets will also continue to dominate office absorption. Airport South would absorb 13,800 square feet by 2015 and another 10,800 square feet by 2020 if no changes are made to current conditions, in terms of office environment, nodes, infrastructure, or marketing. However, there is the opportunity to enhance the overall competitiveness of Nolensville Pike as an office node within an inner-city sub-market. Other areas within the inner city could also benefit from a change in physical character and marketing approach. Without some changes, sub-markets like Metro Center are also expected to perform below-par.

Employment-Generated Office Demand

Office demand forecasts were also generated based on employment projections for office-related industries including finance, insurance, real estate,

professional & technical services, management services, and medical professional services. These projections suggest growth of about 47,600 jobs in office-related industries or 35.0% by 2020. A total of about 27,100 jobs will be added in professional and technical services, and another 13,600 jobs will be added in management services in the Nashville Metropolitan Statistical Area (MSA). Pro-active regional economic development efforts could yield higher numbers, depending on competitive conditions.

Table 31.	EMPLOYMENT PROJECTIONS IN OFFICE-FOCUSED
	INDUSTRIES, NASHVILLE MSA, 2010-2020

				2010-2020) Change
Selected Industry	2010	2015	2020	Number	Percent
— : ()	04,000		~~~~~	4	0.00/
Finance/Insurance 1/	21,600	22,200	22,900	1,300	6.0%
Real Estate	12,400	13,100	13,800	1,400	11.3%
Prof/Technical Svcs	48,500	64,200	75,600	27,100	55.9%
Management Svcs 2/	29,700	38,500	43,300	13,600	45.8%
Medical Offices 3/	23,900	25,500	28,100	4,200	17.6%
TOTAL	136,100	163,500	183,700	47,600	35.0%
Notes:	1/ Excludes Ban	ks/lending insti	tutions.		
	2/ E.g., Corporat	e Offices.			
	3/ Excludes Hos	pitals and Clini	CS.		
Sources:	US Bureau of the	e Census, MTS	SU, Woods &	Poole, and	
	Randall Gross / Development Economics.				

Within Nashville-Davidson, office employment is projected to increase by 20,000 or 25.4% by 2020. This includes 13,800 professional & technical jobs and 5,300 medical office jobs but only about 1,600 management service jobs. Finance and real estate are expected to lose employment between 2010 and 2015, but employment in both industries can stabilize and even increase between 2015 and 2020. Again, changes in the overall environment for business can influence these projections one way or the other. Office-related employment projections are summarized by industry in the following table.

INDUSTRIES, NASHVILLE-DAVIDSON, 2010-2020					
				2010-2020) Change
Selected Industry	2010	2015	2020	Number	Percent
Finance/Insurance 1/	12,000	11,100	11,400	(600)	-5.0%
Real Estate	6,500	6,100	6,400	(100)	-1.5%
Prof/Technical Svcs	28,500	34,200	42,300	13,800	48.4%
Management Svcs 2/	17,800	18,500	19,400	1,600	9.0%
Medical Offices 3/	13,800	15,900	19,100	5,300	38.4%
TOTAL	78,600	85,800	98,600	20,000	25.4%
Notes:	 1/ Excludes Banks/lending institutions. 2/ E.g., Corporate Offices. 3/ Excludes Hospitals and Clinics. 				
Sources: US Bureau of the Census, MTSU, Woods & Poole, and Randall Gross / Development Economics.				nd	

Table 32. EMPLOYMENT PROJECTIONS IN OFFICE-FOCUSED INDUSTRIES, NASHVILLE-DAVIDSON, 2010-2020

Competitive Framework

The competitive framework for office was examined in order to determine the capture and opportunities for office occupancy and development within the Study Area. Nolensville Pike does not have an existing significant office node, yet must compete for office tenants with well-established and attractive nodes like <u>Brentwood</u>, Cool Springs, and West End that are located near executive housing areas, shopping, and amenities. The Study Area must also compete with downtown for those office users who want to be located in the financial hub, near State Government, accessible to cultural and sports amenities, or in a high-rise building with a view. The Study Area must also compete with other portions of the Airport sub-markets, which typically have somewhat better access and proximity to the airport itself. Mixed-use projects like Lenox Village are also competitive because of their location near the study area on Nolensville Pike. This project is described below.

Lenox Village

This newly-emerging new urban mixed-use node is located further out

Nolensville Pike near Williamson County. This relatively high-density project includes mixed residential, town-center retail, and office space. Several projects within the node are being marketed for office space, including the Lenox village Lifestyle Center, Park View Building, Regent Building, and Village Shops. The Lifestyle Center has 37,494 square feet, with 29,532 square feet (78.8%) available. Current office leases include a medical practice and offices for Nokian Tyres, while the other commercial space is occupied mainly by retail and personal service tenants.

The 8,437 square-foot Park View Building is almost fully-occupied, with office tenants including Edward Jones Investments, Marc Lynn Architectural Services, Hendon



Chiropractic, Allstate Insurance, and others. The 12,655 square foot Regent Building is also fully-occupied, but office tenants primarily include the developer Regent Homes and Regent Realty, a mortgage company and the remaining tenants are retail. Most of the project's office tenants to date are consumeroriented financial, real estate, or medical services. Lenox Village and other office uses along Nolensville Pike are competitive with the Study Area because they share some of the same commuter market for consumer and business services.

Study Area Office Potentials

Based partly on the analysis of market demand and competitive nodes and projects, office potential was forecasted for the Study Area through 2020. Again, office potentials were determined using several interrelated models, absorption- and employment-based. Several scenarios were developed based on the level of investment and marketing for enhancing the environment for office, creating a new office node, and pro-actively recruiting office users to the study area. A "Low" Scenario was developed which assumes that no new investment or pro-active marketing will be used to attract office uses to this area. A "Moderate" Scenario assumes a moderate level of investment and marketing to help attract office uses to the area. Finally, a "Nodal Development" Scenario assumes that a high level of infrastructure investment and physical improvements will be made within the study area to establish a specific mixeduse node supportive of office users and that a pro-active recruitment strategy would be employed to attract tenants. These scenarios are described in more detail in the Volume 1 Report.

It should also be noted that, within the Nodal Development Scenario, there can also be "drop-in" uses such as major corporate headquarters recruited from outside of the market area through aggressive economic development efforts. In some cities, companies are attracted through incentives that reduce the effective development cost or rent. Office projections generated by the Nashville Area Chamber of Commerce or the Mayor's Office of Economic and Community Development for the Fairgrounds Site may assume pro-active incentives and recruitment of corporate uses that are not included in office market forecast assumptions. Metro economic development agency staff note that four companies have already expressed interest is locating large corporate offices at the Fairgrounds Site, based in part on their recruitment efforts. Finally, the market analysis is restricted to a five or ten-year forecast period based on realistic economic projections, while there may be opportunities for corporate relocations within and beyond this forecast period that are not included in the market findings.

Absorption-Based Forecasts

Based on the absorption models, potential was forecasted for 20,000 to 230,000+ square feet of net additional office use by 2020. The Low Scenario will generate potential for 20,000 square feet of net new office use in the study area above and beyond existing uses.

Table 33.	OFFICE DEMAND FORECAST, NOLENSVILLE PIKE STUDY AREA, 2010-2020			
Scenario	2010-15	2015-20	TOTAL	
Low Moderate	8,700 14,500	11,300 45,300	20,000 59,800	
Node Develop.	40,100 Randall Gross/ Develo	190,000	230,100	
Source:	Randall Gross/ Develo	pment		

The Moderate Scenario would generate potential for about 60,000 to 70,000 square feet, while the Nodal Development Scenario would generate potential for up to about 230,000 square feet depending on the level of investment and marketing. "Drop-in" corporate uses recruited through pro-active marketing efforts and incentives could also boost this potential.

Economics.

Employment-Based Forecasts

Employment-driven office potential was forecast for the Moderate and Nodal Development Scenarios. Based on the assumptions in the Moderate

Scenario, the study area can expect office potential of 60,000 to 80,000 square feet by 2020. The area would capture about 15,000 to 25,000 square feet by 2015, and another 55,000 to 60,000 square feet by 2020. These potentials are disaggregate by type of business below, with medical office and finance/insurance generating the highest demand.

Table 34.	EMPLOYMENT-GENERATED OFFICE		
	DEMAND, NOLENSVILLE PIKE STUDY AREA,		
	2010-2020 (MODERATE SCENARIO)		

Industry	2010-15	2015-20	TOTAL
— . "	= 000	10.000	00.400
Finance/Insurance	5,300	16,800	22,100
Real Estate	2,600	8,400	11,000
Prof/Technical Svcs	2,600	9,200	11,800
Management Svcs	-	-	-
Medical Offices	5,300	21,000	26,300
Total	15,800	55,400	71,200

Source:

Randall Gross / Development Economics

The Nodal Development Scenario will help the study area capture up to about 270,000 square feet of office use by 2020, including about 120,000 square feet in professional and technical services, and 95,000 square feet in management services (such as corporate offices) if there is a pro-active marketing strategy.

EMPLOYMENT-GENERATED OFFICE
DEMAND, NOLENSVILLE PIKE STUDY AREA,
2010-2020 (NODAL DEVELOPMENT SCENARIO)

Industry	2010-15	2015-20	TOTAL
Finance/Insurance	5,300	16,800	22,100
Real Estate	9,300	8,400	17,700
Prof/Technical Svcs	8,500	109,300	117,800
Management Svcs	2,600	92,400	95,000
Medical Offices	5,300	10,100	15,400
Total	31,000	237,000	268,000

Randall Gross / Development Economics

Source:

Potential would be generated for about 30,000 square feet by 2015, but as infrastructure investments and marketing efforts are implemented, the area will gradually see increased capture of another 240,000 square feet between 2015 and 2020.

Summary Potentials

Based on the two models (absorption-based and employment-based) overall office potential for the study area is summarized below. Overall, the Low Scenario would yield potential for about 20,000 square feet by 2020 while the Moderate Scenario will yield market potential for about 60,000 to 70,000 square feet.

Scenarios	2010-2015	2015-2020	TOTAL
Low Moderate	8,700 14,500-15,800	11,300 45,300-55,400	20,000 59,800-71,200
Nodal Develop.	31,000-40,100	160,000-240,000	191,000-280,100

The Nodal Development Scenario will clearly generate substantive capture of the regional market of 190,000 to 280,000 square feet by 2020. Again, this scenario assumes broad investment in the creation of a mixed-use node that is attractive for office development and also a pro-active marketing effort to recruit and attract office tenants to the area. These efforts are described in the Volume 2 Report.

Key Growth Opportunities

Existing office uses in the study area and nearby generally function to serve the local consumer (household) market base or as part of industrial (office / warehouse) uses. There is very limited pure business office use in the area aside from non-profits and government agencies. Under the Low and Moderate Scenarios, future growth opportunities will continue to relate largely to consumer and industrial-driven office use such as:

- Financial services (loans, consumer investment, tax preparation)
- Insurance
- Real Estate
- Legal (immigration and foreign services)
- Travel and transport (foreign travel)
- Non-Profits (serving the immigrant communities)
- Service offices for industrial companies, contractors, etc.

There is also the opportunity for design professional office use, aligned with the "artisan industrial" complex and associated craft industrial uses noted previously. Such designers and other professionals may include:

- Architects
- Interior Designers
- Web Designers
- Graphic Artists
- Software Design and Internet Services
- Specialty Design Contractors
- Music Publishers/Producers/Reps
- Design/other Associations
- Green Businesses, etc.

Finally, development of a new office/mixed-use node would allow for recruitment of technical and professional services as well as management services, back office, and insurance or financial services relating to health care. Linkages with universities and other institutions could generate spin-off potential for research & development space, although there are challenges to this prospect not the least of which is that the study area is, while proximate, not located directly adjacent to a major research university. To sum, the nodal development scenario would assist in the recruitment of:

- Professional & Technical Services
- Management Services/Corporate Office
- Insurance/Financial Services (esp relating to health care)
- State Government
- Association Headquarters
- Institution-Related Research & Development (under certain limited circumstances)

Space Requirements

The space requirements for the various tenants noted here would vary significantly. Most of the consumer-oriented office users typically require space of 1,000 to 3,000 square feet in the Nolensville Pike area. The design-oriented professionals could range in size from 2,000 to 10,000 square feet or more. The node-based businesses would also range in size from 2,500 (for site-serving offices) up to 40,000 square feet. There is also the opportunity for larger "drop-in" uses such as a major national or regional headquarters that could require 60,000 square feet or more, but these opportunities are relatively rare. R&D uses could also vary significantly in size, but the opportunities, again, are limited.

Office Locations

Unlike industrial use, there is no existing significant office node within the study area on which to build and structure the retention and growth of existing businesses. Instead, there are opportunities for office infill, mixed-use, and new nodal development under certain conditions.

- Flex Office Parks. There are several flex office/industrial parks located on the periphery of the study area and one new project under development within the study area itself.
- Fairgrounds Site. There is the opportunity to establish a new office/mixed-use node at the Fairgrounds Site, as has been proposed by Metro officials.
- Other Mixed-use Nodes. There is also the opportunity to create other mixed-use nodes within the study area such as near the intersection of Thompson Lane and Nolensville Pike, as there will continue to be demand for professional, consumer-oriented office space in that area.

Summary

The Nolensville Pike area is not currently known as an office market and in fact, is located on the periphery of the main office sub-markets in the area. There is very little existing office space in the study area but Metro Government has an interest in pursuing office use as part of mixed-use development of its Fairgrounds Site. This office market analysis developed three scenarios for office potential in the study area, including this site. In the higher scenario, potential was forecasted for up to 280,000 square feet of office space in the area, but only if a number of conditions are met for the development of new nodes such as the Fairgrounds Site. This market forecast already assumes that a new sub-market would be established in the corridor that would compete on a regional basis for office demand. While there will be growing demand for office space and the opportunity for attracting additional non-market "drop in" corporate users, the environment will need to be supportive in order to maximize the long-term impact. Enhancements include improvements to the physical environment along Nolensville Road to create an appropriate "gateway" into business sites. There are also emerging classes of uses, particularly technical firms and professionals in web-based businesses that would be attracted to certain types of space in the area.