

Capturing the Moment

Accelerating tech sector growth is key to the future of local economies.

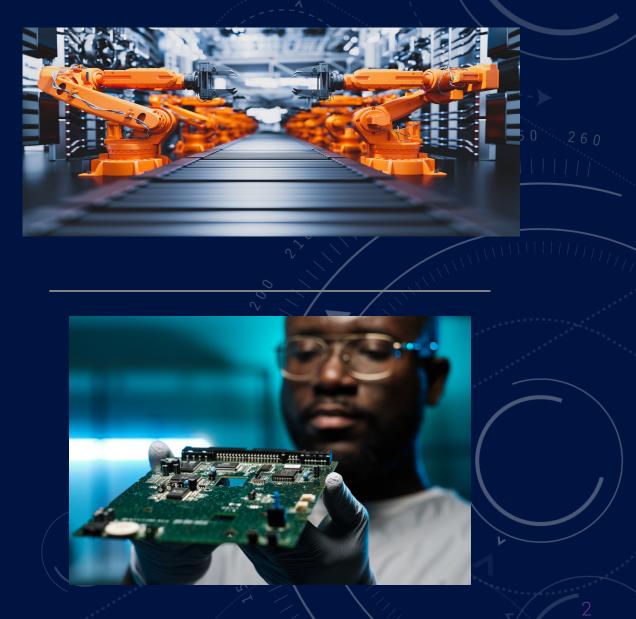
The City of North Miami *could* be a leading regional tech hub—its tech sector grew twice as fast as the rest of the US over the last 5 years.

But despite this growth, Tech jobs as a share of the City's total employment still lags the rest of the nation.

The *NOMI Tech Initiative* is a 7-point plan to position the City at the competitive forefront in the race for *equitable* Tech sector business growth.

This memorandum details the Analytics used to develop the plan.





Why Tech Matters

The Advanced Industries / Tech Sector

According to the Brookings Institute the Advanced Industries, or Broad Tech Sector — is composed of 50 Industries across Professional & Business Services, Manufacturing, and Energy Production.

Industries

Advanced Services

5413 Architecture & Engineering 5416 Management Consulting 5415 Computer Systems Design 5179 Other Telecommunications 5182 Data Processing & Hosting 5112 Software Products 5173 Wireless Telecom Carriers 5191 Web Search and Internet Publishing 5417 R&D Services 2122 Metal Ore Mining 5174 Satellite Telecommunications 6215 Medical & Diagnostic Laboratories 5152 Cable & Other Programming

Advanced Manufacturing

3344 Semiconductors 3345 Precision Instruments 3341 Computer Equipment 3339 General Purpose Machinery 3391 Medical Equipment & Supplies 3399 Jewelry, Sporting Goods 3364 Aircraft Products & Parts 3253 Pesticides & Fertilizers 3346 Magnetic & Optical Media 3279 Stone & Mineral Products 3333 Commercial & Service Machinery 3369 Misc. Transportation Equipment 3336 Engine & Power Equipment 3366 Ships & Boats 3365 Railroad Rolling Stock 3311 Iron & Steel Products 3315 Foundries 3351 Electrical Lighting Equipment

3313 Aluminum Products 3271 Clay & Refractory Products 3342 Communications Equipment 3241 Petroleum & Coal Products 3331 Agri., Constr., Mining Machinery 3251 Basic Chemicals 3343 Audio & Video Equipment 3353 Electrical Equipment 3363 Motor Vehicle Parts 3361 Motor Vehicles 3259 Misc. Chemicals 3362 Motor Vehicle Body & Trailers 3254 Pharmaceuticals 3359 Misc. Electrical Equipment 3352 Household Appliances 3332 Industrial Machinery 3252 Resins & Synthetic Rubbers

Energy

2111 Oil & Gas Extraction 2211 Power Generation & Supply

BROOKINGS

Accelerating broad Tech Sector growth has become one of the most important development policies for local economies because this broader Tech Sector drives economic growth in the US:

- Tech Sector Jobs Grew 4.7 times faster than the rest of the economy since 2015;
- The Tech Sector accounts for 9% of all jobs, and **18**% of all sales revenue in the US;
- 60 percent of U.S. exports;
- 85 percent of all U.S. patents;
- 90 percent of private-sector R&D spending; and
- Employs 80 percent of the nation's engineers.



The broader Tech sector drives employment across the entire economy — each new job created in the Tech Sector creates almost 10 new jobs in other industries, compared to only 6 for non-Tech Sector jobs.

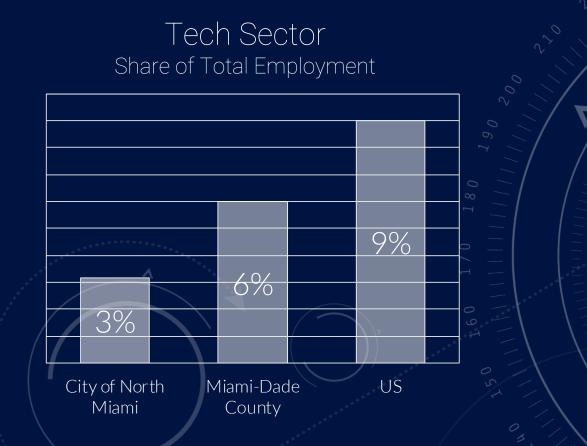
Growing access to Tech sector jobs is a crucial way to increase wages and expand economic opportunity and upward mobility. On average Tech Sector jobs pay 1 ¹/₂ to 3 times the US average wage.

1 Tech Sector Job \longrightarrow 10 Jobs in Other Industries

Tech Sector Wages = $3 \times$ Average US Wage

The City of North Miami has a rapidly growing, but small Tech sector— 457 Tech sector jobs in the City account for 3% of all jobs, compared to 6% for the County and 9% for the rest of the US.

Small gains in its growing Tech Sector could have large impacts — so that increasing the share of tech sector employment is a major opportunity to re-shape the City's economy.



Accelerating Tech Sector growth relies on 11 key factors — and Based on these factors, North Miami has considerable strengths but faces significant challenges to becoming a leading regional tech hub.

Tech Industry Growth Factors

- 1. A Growing Local Economy
- 2. Local Tech Sector Demand Market
- 3. Tech Industry Strengths
- 4. Focus on Local Businesses and Entrepreneurs
- 5. A Skilled Labor Force
- 6. Access to Continuous Education and Training
- 7. Local Research and Commercialization Infrastructure
- 8. Access to Capital
- 9. Dedicated Organizational Infrastructure
- 10. Place-Based Tech Growth Investment
- 11. Marketing the Local Tech Brand

1. A Growing Local Economy

North Miami anchors a key part of the \$150 Billion Miami-Dade economy, because it's a major local economy in its own right.

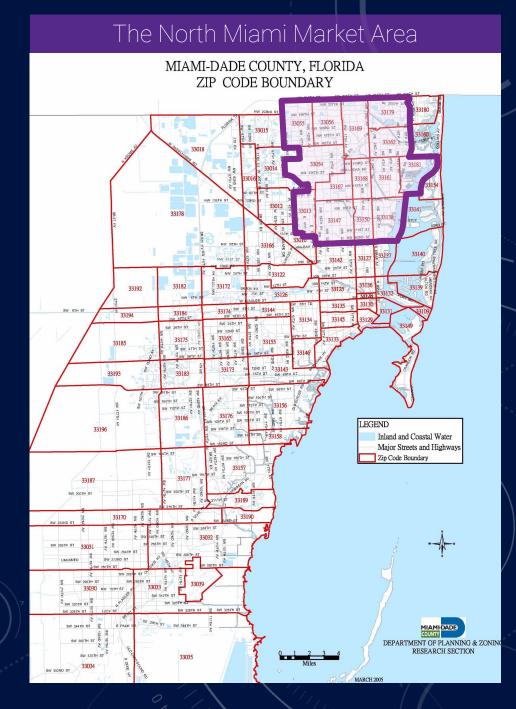
The 5-mile radius surrounding North Miami — the City's Market Area (or Greater North Miami) - has over 500,000 residents, 12,000 Businesses, and is a \$45.5 Billion dollar demand market for goods and services.

If it were its own city, it would be the second largest City in Florida

> 501,000Residents 12,444 5.5 B

Businesses

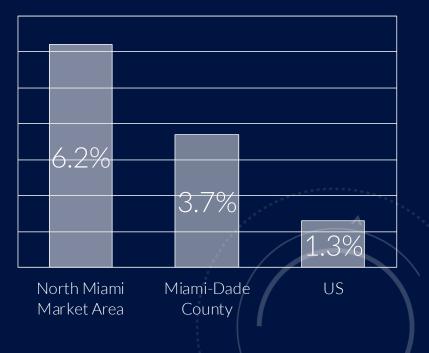
Annual Consumer Demand



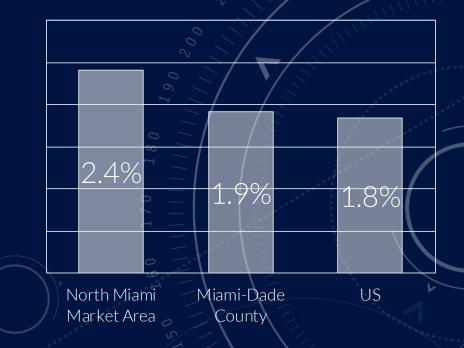
The North Miami Market Area is also one of the County's hottest employment markets. It's employment grew by over 6% prior to the Pandemic—1 ¹/₂ times the rate for the rest of the County.

North Miami's post-pandemic job growth has continued to outpace the County and the nation.

Employment Growth 2015-2020



Employment Growth



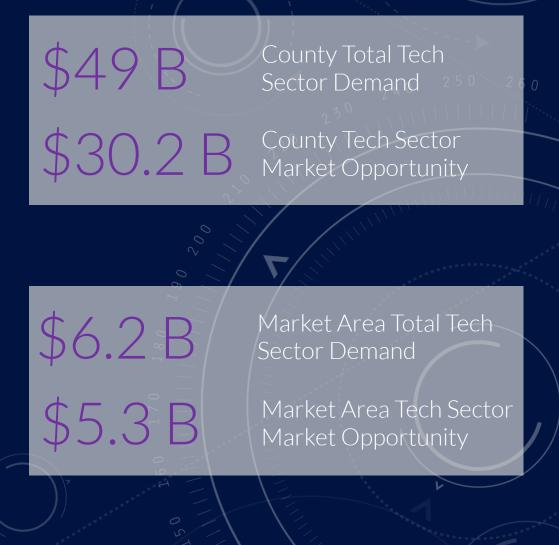
2. Local Tech Sector Demand

A Large local demand market for tech sector goods and services is crucial to support the growth of existing and *new* business.

Total demand for Tech Sector products and services in the County reached \$49 B in 2020. However, only 38% of this demand was served by local businesses.

Total demand for Tech Sector products and services in the *North Miami Market area reached \$6.2 B in 2020*, but only 15% of this demand was supplied by businesses in and around North Miami.

The gap between regional demand for tech goods and services versus what local firms supply represents a \$30.2 Billion tech sector market opportunity across the County, and a \$5.3 Billion tech opportunity in greater North Miami.



The North Miami Market Area Advanced Industry Sector 2020

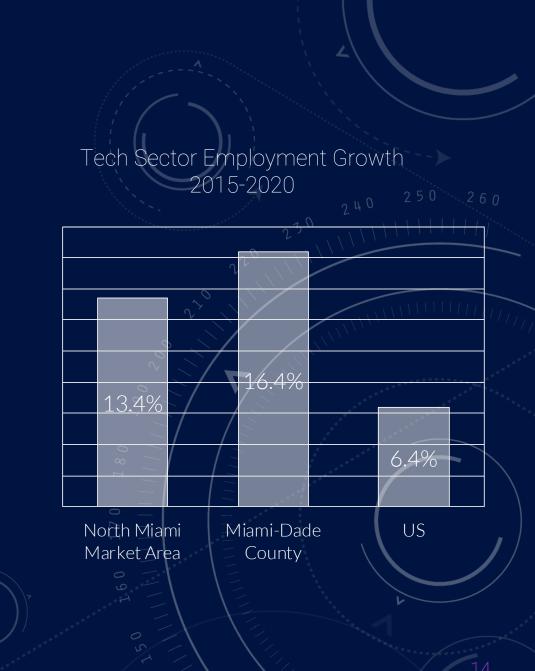
This growing Tech sector demand has driven explosive employment growth. Miami-Dade County is one of the nation's hottest Tech sector markets — the County's 16% tech sector job growth over the last 6 years was more than 2 ¹/₂ times the rest of the US.

Tech sector employment in the North Miami market area followed closely, growing by more than 13% over the same period.

The North Miami Market Area:

486 Tech Sector Establishments

9,549 Tech Sector Jobs



The US Advanced Industry Sector

Payrolled Services Business Establishments		Employees	Employment Growth 2015-2020	Growth Growth		Total Sales	
5112 Software Products	39,207	494,451	47%	25%	\$203,638	\$298,889,683,062	
5152 Cable & Other Programming	1,215	50,059	-20%	-30%	\$150,854	\$83,015,092,090	
5173 Wireless Telecom Carriers	26,695	616,909	-15%	-16%	\$114,788	\$623,523,285,112	
5174 Satellite Telecommunications	819	8,719	-3%	29%	\$122,487	\$4,542,770,411	
5179 Other Telecommunications	8,087	85,713	2%	9%	\$138,078	\$51,345,690,462	
5182 Data Processing & Hosting	28,915	364,265	20%	15%	\$157,755	\$224,400,775,874	
5191 Web Search and Internet Publishing	27,785	370,920	45%	21%	\$228,058	\$331,513,871,608	
5413 Architecture & Engineering	142,432	1,611,702	7%	4%	\$107,573	\$346,705,554,431	
5415 Computer Systems Design	296,210	2,368,760	15%	26%	\$140,524	\$506,485,632,574	
5416 Management Consulting	289,649	1,850,503	16%	23%	\$109,633	\$385,476,746,187	
5417 R&D Services	35,191	775,754	14%	9%	\$169,495	\$285,374,011,787	
6215 Medical & Diagnostic Laboratories	22,938	294,630	<u>7</u> %	<u>17</u> %	<u>\$81,886</u>	\$59,224,744,944	
	919,140	8,892,387	13%	16%	NA	\$3,200,497,858,542	

Energy & Extraction						
2111 Oil & Gas Extraction	6,847	133,650	-33%	-11%	\$218,511	\$347,909,177,339
2122 Metal Ore Mining	387	41,173	-2%	19%	\$116,354	\$34,767,038,595
2211 Power Generation & Supply	10,252	386,405	- <u>3</u> %	- <u>2</u> %	\$165,145	\$404,941,029,302
	17,485	561,228	-12%	-3%		\$787,617,245,236

							/
		Payrolled Business Establishments	Employees	Employment Growth 2015-2020	Employment Growth 2020-2030	Avg. Earnings Per Job	Total Sales
Manuf	acturing						
3241	Petroleum & Coal Products	2,342	111,294	0%	0%	\$183,068	\$532,767,638,156
3251	Basic Chemicals	3,365	150,097	1%	5%	\$136,121	\$286,736,834,189
3252	Resins & Synthetic Rubbers	1,691	93,345	-1%	0%	\$121,851	\$115,073,043,341
3253	Pesticides & Fertilizers	1,378	37,059	0%	13%	\$110,529	\$40,586,617,243
3254	Pharmaceuticals	5,150	313,714	11%	7 10%	\$161,825	\$239,594,850,414
3259	Misc. Chemicals	3,029	81,669	2-2%	4%	\$96,210	\$45,642,381,508
3271	Clay & Refractory Products	1,396	38,849	2 -11%	-12%	\$65,389	\$8,016,569,966
3279	Stone & Mineral Products	3,988	79,304	3%	-5%	\$70,191	\$26,345,208,579
3311	Iron & Steel Products	911	83,214	J -7%	-5%	\$105,006	\$107,264,749,897
3313	Aluminum Products	686	57,712	-3%	-5%	\$85,037	\$37,892,420,889
3315	Foundries	1,757	108,109	-14%	2%	\$72,355	\$26,504,806,488
3331	Agri., Constr., Mining Machinery	4,399	206,206	-14%	-3%	\$91,302	\$94,434,435,489
3332	Industrial Machinery	4,593	118,104	3%	3%	\$109,227	\$42,779,838,041
3333	Commercial & Service Machinery	3,035	88,959	-1%	2%	\$96,214	\$27,721,029,965
3336	Engine & Power Equipment	1,265	93,920	-7%	3%	\$98,577	\$48,564,911,391
3339	General Purpose Machinery	7,468	268,648	0%	, \ 5%	\$87,892	\$109,202,614,366
3341	Computer Equipment	1,892	161,086	-1%	6%	\$254,510	\$56,663,157,075
3342	Communications Equipment	2,443	86,579	-3%	-24%	\$132,475	\$39,908,822,384
3343	Audio & Video Equipment	√ 859	20,002	-3%	-5%	\$141,826	\$4,725,602,535
3344	Semiconductors	5,970	373,085	0%	2%	\$139,944	\$122,092,588,969
3345	Precision Instruments	9,054	421,309	5%	6%	\$129,309	\$166,477,392,666
	Magnetic & Optical Media	0 990	12,160	-29%	-1%	\$144,278	\$2,891,831,826
3351	Electrical Lighting Equipment	1,681	43,270	-10%	-24%	\$90,998	\$11,426,264,853
3352	Household Appliances	576	61,613	-1%	0%	\$87,294	\$20,833,369,001
	Electrical Equipment	2,902	140,542	-3%	1%	\$100,623	\$38,482,339,710
	Misc. Electrical Equipment	2,260	142,790	9%	10%	\$97,280	\$61,853,553,137
	Motor Vehicles	597	225,422	11%	8%	\$103,409	\$394,144,124,696
3362	Motor Vehicle Body & Trailers	~	149,889	0%	-2%	\$65,789	\$48,689,647,279
	Motor Vehicle Parts	5,752	531,662	-7%	4%	\$75,886	\$270,575,324,141
3364	Aircraft Products & Parts	3,469	523,961	7%	3%	\$129,385	\$271,232,850,717
	Railroad Rolling Stock	338	23.099	-24%	-10%	\$94,066	\$17,817,691,639
	Ships & Boats	0 1,932	139,687	0%	-9%	\$83,823	\$36,332,727,980
	Misc. Transportation Equipment	1,091	35,401	2%	-7%	\$77,529	\$20,534,713,362
	Medical Equipment & Supplies	12,655	325,210	3%	4%	\$105,193	\$97,777,935,544
	Jewelry, Sporting Goods	20,665	303,712	-5%	<u>1</u> %	\$74,367	\$66,418,589,229
5555	sewery, sporting coods	124,834		<u>0%</u>	<u>-</u> /3 2%	<u> </u>	\$3,538,006,476,662
		124,034	5,650,683	υ%	∠ ⁄₀		\$3,538,000,470,002
		0 - 1		1 1 1			
Advand	ced Industry totals	1,061,459	15,104,297	6.4%	10%	-	\$7,526,121,580,440
US Tot	als	10,433,615	160,385,413	1.3%	6%	\$72,048	\$42,034,954,777,200
Advand	ced Industry Percentage of Total	10%		478%	152%	168%	18%
		/ /		REFERENCE.			

The Miami-Dade County Advanced Industry Sector

Services	Payrolled Business Establishments	Employees	Employment Growth 2015-2020	Employment Growth 2020-2030	Avg. Earnings Per Job	Total Demand	Total Sales	Demand Met In-Region	Location Quotient
5112 Software Products	207	2,462	284%	73%		\$2,216,524,095	\$595,526,606	22%	0.64
5152 Cable & Other Programming	36	1,871	2%	-16%		\$906,339,371	\$2,738,557,872	100%	4.17
5173 Wireless Telecom Carriers	209	3,550	-19%	-49%		\$5,056,691,300	\$4,846,606,874	83%	0.72
5174 Satellite Telecommunications	10	128	-35%	-45%		\$37,779,402	\$64,656,735	100%	1.82
5179 Other Telecommunications	118	1,677	23%	18%		\$429,267,838	\$902,514,589	74%	2.40
5182 Data Processing & Hosting	194	963	1%	-12%		\$1,724,940,873	\$831,750,413	46%	0.31
5191 Web Search and Internet Publishing	234	1,255	25%	1% 4%		\$2,696,494,854	\$582,537,318	11%	0.44
5413 Architecture & Engineering	1,374 1,617	11,690 10,291	12% 31%	4% 37%		\$2,732,077,145	\$2,217,357,728	70% 47%	0.89 0.52
5415 Computer Systems Design	4,656		24%	37%		\$3,958,788,493	\$2,245,803,449	47% 90%	0.52 1.26
5416 Management Consulting 5417 R&D Services	4,030	19,417 2,297	24 % 66%	34%		\$2,722,460,585 \$2,519,852,188	\$4,128,631,867 \$694,213,252	90% 20%	0.36
6215 Medical & Diagnostic Laboratories	235	2,297	<u>20%</u>	21%		<u>\$481.271.880</u>	<u>\$462.905.789</u>	79%	1.12
	9,159	58,443	22%	20%		\$25,482,488,024	\$20,311,062,492	56%	
Manufacturing									
3241 Petroleum & Coal Products	14	938	27%	-16%	\$94,613	\$3,732,965,186	\$594,014,077	4%	1.11
3251 Basic Chemicals		176	50%	41%		\$901,758,223	\$416,649,742	27%	0.14
3252 Resins & Synthetic Rubbers		51	-47%	-58%		\$300,267,590	\$21,780,878	4%	0.07
3253 Pesticides & Fertilizers		84	7%	23%	\$82,799	\$247,535,983	\$76,423,677	23%	0.29
3254 Pharmaceuticals	46	1,325	30%	20%	\$182,375	\$1,649,471,922	\$579,736,861	27%	0.50
3259 Misc. Chemicals	23	200	3%	0%		\$241,214,149	\$119,642,044	30%	0.27
3271 Clay & Refractory Products		35	-14%	1%			\$5,486,732	8%	0.10
3279 Stone & Mineral Products	26	226	9%	-1%		\$153,005,838	\$55,080,000	32%	0.31
3311 Iron & Steel Products		67	52%	28%		\$241,411,237	\$113,574,479	29%	0.07
3313 Aluminum Products	11	69	88%	13%		\$105,710,525	\$40,966,835	23%	0.13
3315 Foundries		155	-16%	-51%		\$34,139,943	\$42,959,931	43%	0.19
3331 Agri., Constr., Mining Machinery	13	88	57%	-27%		\$628,545,505	\$36,435,186	3%	0.05
3332 Industrial Machinery	28	282	-18%	-16%		\$202,562,637	\$72,153,991	14%	0.37
3333 Commercial & Service Machinery	20	629	113%	40%		\$257,634,712	\$152,020,711	33%	0.82
3336 Engine & Power Equipment	6	141	16%	39%		\$147,355,009	\$55,655,136	11%	0.17
3339 General Purpose Machinery	41	477	-7%	○ 6% √ 36%		\$640,846,873	\$152,015,567	11%	0.20
3341 Computer Equipment	10	146 343	33% 183%	√ 36% 16%		\$367,245,988	\$17,096,034 \$119,790,219	2% 19%	0.10
3342 Communications Equipment	27 7	343 32	61%				\$119,790,219 \$2,822,851	19% 5%	0.42 0.24
3343 Audio & Video Equipment 3344 Semiconductors	, 13	32 179	-9%	259		\$16,441,098 \$542,559,982	\$23,359,259	2%	0.24
3345 Precision Instruments	53	1.245	-9 % -46%	-27%		\$1,047,334,316	\$400,637,838	17%	0.00
3346 Magnetic & Optical Media	26	96	-40%	-43%		\$32,753,192	\$400,037,838 \$22,772,634	39%	0.89
3351 Electrical Lighting Equipment	26	319	-22%	-52%		\$84,708,210	\$60,439,074	29%	0.85
3352 Household Appliances	4	11	-70%	02.0	\$80,909	\$148,022,651	\$6,752,716	3%	0.02
3353 Electrical Equipment	14	432	13%	4%		\$184,660,470	\$85,214,439	17%	0.33
3359 Misc. Electrical Equipment	25	146	-24%	-28%		\$295,603,983	\$63,097,090	11%	
3361 Motor Vehicles	3	28	65%	41%		\$2,918,534,400	\$21,953,449	0%	0.04
3362 Motor Vehicle Body & Trailers	15	310	13%	9%		\$316,029,905	\$94,928,433		0.24
3363 Motor Vehicle Parts	27	511	-23%	-7%		\$808,852,735	\$269,293,529	10%	0.10
3364 Aircraft Products & Parts	63	1,691	40%	27%		\$1,038,527,700	\$635,521,618	24%	0.36
3365 Railroad Rolling Stock		<10			Insf. Data	\$106,491,971	\$566,689	0%	0.01
3366 Ships & Boats	50	1,529	44%	6%		\$515,537,889	\$390,344,176	22%	1.25
3369 Misc. Transportation Equipment	11	108	56%	25%	\$69,860	\$130,550,913	\$66,416,220	35%	0.23
3391 Medical Equipment & Supplies	139	1,189	-22%	-45%		\$657,959,082	\$377,204,029	25%	0.45
3399 Jewelry Sporting Goods	173	1.638	-6%	4%		<u>\$469.532.022</u>	<u>\$362.940.581</u>	29%	0.67
	948	14,896	2%	1%		\$19,469,966,692	\$5,555,746,727	5%	
Energy & Extraction									
2111 Oil & Gas Extraction	1	<10			Insf. Data	\$734,410,184	\$11,205,216	1%	0.00
2122 Metal Ore Mining		<10			Insf. Data		\$6,484,364	4%	0.01
2211 Power Generation & Supply	40	2,192	- <u>1</u> %	-22%	\$160,271	\$3.307.856.058	\$2.366.987.647	<u>58%</u>	0.68
	42	2,192	-1%			\$4,163,212,266	\$2,384,677,227	90%	
Advanced Industry totals	10,148	75,531	16.4%		-	\$49,115,666,982	\$28,251,486,445	38.5%	0.61
County Totals	105,305	1,318,262	3.7%	6.9%	\$66,406	\$317,365,443,552	\$324,052,331,734	58.0%	
Advanced Industry Percentage of Total	10%	6%	445%	213%	130%	15%	9%		
	1			1			11,		

3. Tech Industry Strengths

The most effective strategy for growing Tech sector employment is to target industries with the strongest local competitive advantages and fastest growth rates.

15 Market Area Tech Sector industries stand out as the City's best bet **Tech Target** Industries. These industries, across services, advanced manufacturing, energy, and media have a combination of 1) rapid employment growth since 2015, 2) compete in the national economy, 3) have above average employment shares, 4) high rates of projected growth, and 5) strong local land, transportation, labor, and business support infrastructure. The Building Materials and Green Energy industries have been added to the City's Tech Targets due to their local market potential and central role in the City and region's greenhouse gas reduction efforts.

The City's Tech Target Industries represent a \$1.9 B opportunity in the Market Area and a \$11.7 B market opportunity across the County.

The City of North Miami Tech Target Industries

	Payrolled Business Est.	Employees	Employment Growth 2020-2030	Avg. Earnings Per Job	Local Demand	Demand Met Locally	Location Quotient	250 26
Advanced Professional & Management Services								
5413 Architecture & Engineering	92	724	6%	\$80,695	\$297,449,898	26%	0.47	
5415 Computer Systems Design	33	496	37%	\$95,448	\$451,964,079	12%	0.21	
5416 Management Consulting	122	1,318	28%	\$87,999	\$276,045,074	27%	0.75	
5417 R&D Services	23	233	33%	\$84,582	\$309,587,524	7%	0.32	
6215 Medical & Diagnostic Laboratories	19	95	24%	\$54,763	\$73,090,834	11%	0.33	
Advanced Manufacturing								
3311 Iron & Steel Products	-	49	28%	\$45,919	\$45,051,633	53%	0.44	
3333 Commercial & Service Machinery	1	63	41%	\$53,934	\$24,929,205	10%	0.71	
3342 Communications Equipment	4	82	22%	\$75,343	\$29,618,337	11%	0.83	
3364 Aircraft Products & Parts		14	51%	\$67,199	\$97,169,026	0%	0.03	
3366 Ships & Boats	8	232	7%	\$54,763	\$25,300,954	19%	1.62	
3391 Medical Equipment & Supplies	10	51	46%	\$47,153	\$84,255,316	2%	0.12	
Software Production & Digital Media								
5112 Software Products	16	127	73%	\$105,242	\$288,497,440	5%	0.29	
5122 Sound Recording Industries	14	26	6%	\$73,322	\$20,687,618	82%	0.82	
Advanced Building Materials & Green Energy								
3323 Architectural and Structural Metals Manufacturing	26	334	5%	\$49,320	\$59,528,047	18%	0.88	
2382 Building Equipment Contractors (Including Solar)	125	2,200	15%	\$49,421	\$479,599,060	66%	0.90	

4. Local Businesses and Entrepreneurial Climate

Miami-Dade has experienced an explosion of new Tech sector employment from out-of-state businesses opening new locations in the County.

But the truth is that long-term, sustainable Tech Sector growth relies on a *combination* of:

- The expansion local businesses;
- Locally created start-ups; and
- Outside investment.

In fact, 87% of all new jobs each year in Miami are created by the expansion of existing local businesses and startups created by *its residents*.

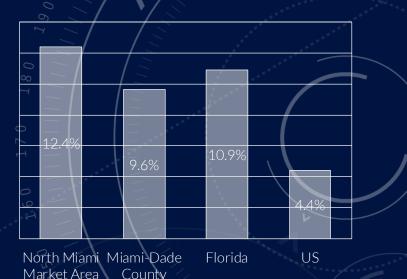
And over **90% of new tech sector jobs** are created each year by locally owned businesses and start-ups.

North Miami is an entrepreneurial hub that's even more dependent on very small businesses and locally created start-ups. In the 5 years prior to the pandemic, the number of new business establishments in the North Miami Market area outgrew the rest of the County, State and US.

Percentage of all New Jobs Created by Local Businesses & Resident-Owned Start-ups

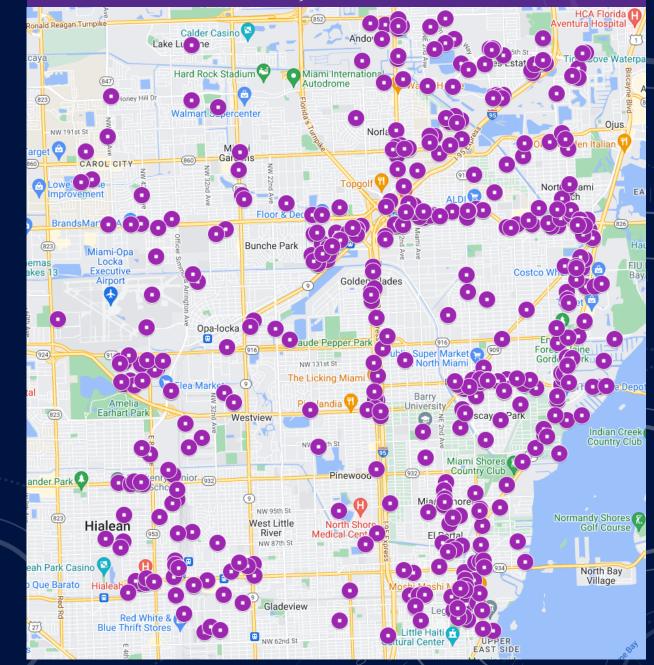
Percentage of all New Tech
 Sector Jobs Created by Local
 Businesses & Resident Start-ups

New Business Establishment Growth 2015-2020



The 486 Tech Establishments in the Market Area average 6 employees in size and cluster mostly on commercial corridors and office parks, but a growing number of singleproprietor firms have been established in home offices in the area's residential neighborhoods.

Market Area Tech Industry Business Establishments



5. A Skilled Labor Force

A Skilled local labor force sustains Tech Business Growth and Provides the next generation of managers, innovators, and entrepreneurs. The North Miami Market area's skilled labor force characteristics are a mixed bag of contrasting measures.

Educational attainment levels across the City's Market Area are significantly lower than the rest of the County, state and nation. The percentage of the population with a Bachelor's degree or more is greater than the rest of the County in only two Census tracts.

Mean annual worker earnings in the Market Area are also lower than the County and the US.

Educational Attainment Population with Bachelor's Degree or Higher



Mean Annual Worker Earnings

TNH



STEM Jobs in County 18% County Residents Employed in STEM Jobs

STEM Jobs in Market Area

16% Market Area Residents Employed in STEM Jobs

However, jobs with high Science, Technology, Engineering and Math requirements — STEM jobs — and residents working in STEM qualified jobs — are comparable to the rest of the County

This built-in local supply of educated, skilled professional and STEM workers *could* be one of its most important strengths to attract new Tech sector investment.

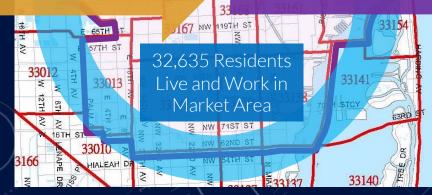
But at the moment the City and its market area export its skilled workers to the rest of the County each day.

The North Miami Market area has more workers than jobs - over 184,000 mostly professional workers and 7,400 STEM workers leave to work elsewhere in the County each day. Only 15% (32,645) of the Market Area's employed residents live and work there.

Daily Worker Inflow / Outflow



84,475 Workers Commute In 2010 184,908 Residents Commute Out



6. Access to Continuous Education and Training

Tech Sector jobs are highly mobile and skill requirements change rapidly. City residents have access to a rich supply of education and training programs, including:

- 10 Colleges and Universities across the County;
- 6 University campuses and programs in the Market area offering 229 programs producing over 4,000 graduates each year 1,500 of those are tech sector and business degree program graduates; and
- And a broad array of training programs Over 3,500 residents of the Market area complete employer focused job skill training programs and Over 1,200 students receive technology and businessrelated training each year.

This local educational ecosystem is a major competitive advantage for the City, as it can produce a significant pipeline of talent each year.

But affordable employer-based upskilling programs offered to lower income and lower skilled workers in North Central Miami-Dade is still a major gap in the local job training system.



7. Research and Commercialization Infrastructure

Supporting the conversion of ideas into commercially viable products and services is at the core of a competitive Tech economy, and the professional services infrastructure in North Miami could support extensive Tech Sector business growth.

A full 13% of all businesses in the market area—over 1,500 firms— are in the business support and finance industries. They employ over 11,00 professionals involved in all aspects of business start-up and support, including Law, Accounting, Management Consulting, Engineering, Design Services, Marketing, Logistics and Business Finance.

The County's research universities have been gaining ground on other Universities in the State, and the 6 Universities and colleges in the market area are a significant base on which to build a robust local research and startup infrastructure.

On the other hand, the South Florida private and non-profit startup ecosystem has undergone explosive growth – and now includes over 438 Accelerators, Incubators, and Investor focused co-working spaces.

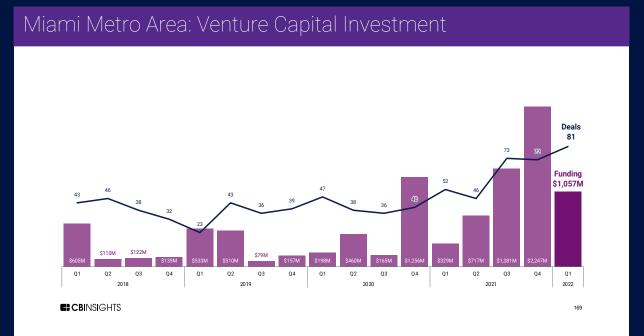
But incubators and accelerators focused on minority and local entrepreneurs from North Miami and North Central Miami-Dade are extremely limited.



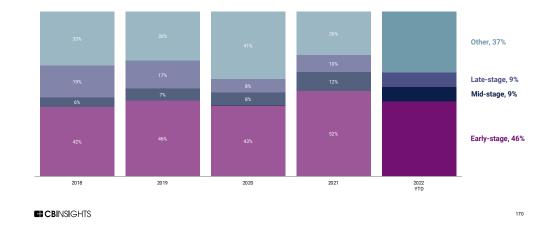
8. Access to Capital

Access to flexible, multi-Source development and incentive funding, especially early phase seed and venture funding—is crucial for sustaining high rates of start-up activity.

South Florida has grown into a major venture capital market. \$4.6 Billion in venture capital investment was placed into local tech startups in 2021—double the prior year's funding. 52% of that was placed into early-stage companies.



Miami Metro Area: Venture Capital Investment by Stage



Yet seed funds and small business incentives focused on North Central Miami-Dade are limited.

Aire Ventures *REDI Scorecard*—a survey of over 1,600 respondents including business owners and investors—found that access to capital, especially for minority and women owned businesses is the most difficult challenge facing the Miami Tech Sector.

Access to *business incentives* in the area and North Miami are limited. Over the last 10 years the State and County have steadily eliminated incentive programs for small business employing less than 20 people.

Florida has ended the State's Qualified Target Industry Tax Refund Program and the County's Incentive Programs are for firms adding 50 jobs or more. Except for a scattering of small business incentive programs in the County's Community Redevelopment Areas, funding for local businesses under 50 employees — 96% of all businesses in Miami-Dade — has been almost nonexistent for the last decade.

New *local* funding is critically needed to expand gap financing, earlystage seed funding, and small business expansion for Tech businesses in North Miami. *Stable, long-term funding pools can be built with a majority of private financing.*

Tech Development Funding Sources

- Seed Funding from City: \$1M for start-up operation costs
- Debt Financing Commitments from Local Banks for capital improvement loans
- Grant Funding raised from local & national Foundations
- Venture capital: Commitments secured though "first look" agreements
- New Markets Tax Credits: \$1 of NMTC credits leverages
 \$5 of development
- North Miami CRA: Annual cash commitment

9. Place-Based Investments

Good Tech Sector development strategies include physical investment, usually anchored by an *Innovation District*—a designated District where leading-edge anchor institutions and companies cluster and connect with start-ups, business incubators and accelerators.

The over 100 Innovation Districts worldwide are a proven strategy to deliver services, provide access to capital, facilitate direct contact between entrepreneurs and service professionals, cross-fertilize innovation, and build the local tech industry brand. Innovation Districts raise local Tech Sector and Tech initiative visibility.

Successful Innovation Districts typically include event spaces or connect to cultural events as part of their operation to bring people into, and further market the local tech economy.

Innovation District Development Keys

- Identity: Make innovation visible and public;
- Diversity: Mix innovation with a range of other uses;
- Continuity: Start with existing people and places;
- Sociability: Bring people together through places and programming;
- Proximity: Build things close together on the ground—not just on the map;
- Mobility: Connect to the broader city and region through multiple transportation modes; and
- Flexibility: Experiment, Observe, Repeat

From: Project for Public Spaces



DISTRICT









Innovation Districts usually include *Innovation Hubs*—accelerators and co-working spaces where development services and programs are delivered in person and virtually to directly support start-ups, business expansions, and new investment. Innovation Hubs can also host worker training and educational programs. High quality Innovation Hubs share 5 common characteristics:

- They provide a single access point for key services in one place, including business planning, mentoring, access to funding & venture capital, access to training & education programs;
- Provide services on-site and virtually;
- Are located at prominent locations in an Innovation District;
- Specialize services for either advanced services or advanced manufacturing, but not both at one location; and
- Are managed by a successful third-party accelerator operator as a for-profit enterprise.







10. Dedicated Organizational Infrastructure

Successfully supporting and sustaining local Tech sector growth requires specialized knowledge, partnerships, networking, and *experience*. The City has no Department nor organization dedicated to Tech sector growth. Miami-Dade County has only recently created the *Innovation Authority* to support Tech industry growth.

Critical Economic development initiatives are extremely difficult to sustain from inside local governments. Alternatively, focused Public Development Corporations are a Traditional Way to Drive Economic Sector Growth — providing Stability, Speed, Expertise, and Funding Flexibility insulated from short-term political turnover.



Virginia Economic Development Partnership







11. Marketing the Local Tech Brand

Aggressively marketing the City's underlying economic qualities and its Tech industry Programs to the local and **national** market is crucial to future Tech Sector growth — Educating businesses, investors and customers about Tech Economy opportunities in North Miami.

NOVATE | INVEST | GROW



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Key Findings

An Attainable Opportunity

Small, sustained increases in tech sector employment can dramatically shift the city's economy:

- The City's Tech sector grew 2% per year since 2015, roughly 12 jobs per year;
- Adding only 35 new Tech Sector jobs, or 6 average sized new tech sector businesses each year would double the City's share of Tech sector employment after 10 years; and
- Would spin-off nearly 3,400 new jobs in other industries.

New Tech Sector Jobs Per Year:

Equals 6 New Tech Businesses

C Doubles the City's Share of Tech Employment over 10 Years

Generates 3,400 Jobs in other Industries over 10 years

Strengths

North Miami has real strengths on which to reach these targets:

- A large, diverse local economy;
- A \$5.3 Billion market opportunity for **all** local Tech Sector businesses, and a \$1.9 Billion market opportunity in the City's Tech Target Industries alone;
- A steadily growing Tech Sector with businesses that compete in the national Tech market, and industries that outperform the local and national economies;
- A large number of residents employed in professional services occupations that support Tech sector start-ups and expansions;
- Booming *regional* venture capital investment; and
- A wealth of local education and training programs.

Challenges

The City faces considerable challenges to growing Tech businesses located *in* North Miami — including:

- Expanding resident access to local training programs;
- Dramatically expanding access to capital, early-stage funding, and small business incentives;
- Building its Tech Industry Brand Educating area leaders and investors about North Miami's considerable economic assets, the size of its economy, the depth of its Tech sector, and building a highly visible Tech economy brand identity like the City of Miami; and
- Building an organizational infrastructure that can deliver Tech business development programs insulated from short-term political changes.

Tech Industry growth doesn't happen on its own.

Building the City's Tech Sector will require a focused effort, a dedicated organizational infrastructure, and new financial resources.

The NOMI Tech Initiative has been structured to provide the playbook, build the infrastructure and provide the tools the City needs to grow its emerging Tech Sector and support its goals for equitable economic growth over the next decade.

The NOMI TECH Initiative companion video details the 7-point NOMI TECH Action Plan.





UrbanCentric Analytics

UrbanCentric Analytics is a boutique urban research and strategic planning consultancy providing services to government, institutions, and private clients. UrbanCentric has completed research, planning, development and media projects for national institutions, foreign clients, private business, and local communities.

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