

Methodology: Land Use Capacity and Demand Analysis

Regulatory and Economic Resources Department
Planning Research and Economic Analysis Section

Residential Capacity and Demand

Future Residential Capacity Equals:

Units from Vacant Land

PLUS

Units from Redevelopment:

Units from Proposed and Approved Redevelopments

PLUS

Units from Redevelopment Potential

Note: The county's capacity analysis does not incorporate **live-local** development since there is no way to anticipate where such development might occur. If it could be incorporated, it would likely result in a further increase in multifamily capacity.

Future Residential Capacity Equals:

Units from Vacant Land

PLUS

Units from Redevelopment:

Units from Proposed and Approved Redevelopments

PLUS

Units from Redevelopment Potential

Units from Vacant Land

Capacity is measured in units and determined as follows:

- Based on future land use designation, zoning, municipal plans, covenants and other legal restrictions.
- **The net capacity of the vacant land =**

The gross capacity

MINUS

An adjustment to allow for Build-out Limitations

MINUS

An adjustment to account for the existence of small vacant or underutilized parcels.

Future Residential Capacity Equals:

Units from Vacant Land

PLUS

Units from Redevelopment:

Units from Proposed and Approved Redevelopments

PLUS

Units from Redevelopment Potential

Units from Proposed and Approved Redevelopment Projects

- Projects analyzed are large-scale redevelopment projects proposed or approved (under administrative review) by Miami-Dade County or a municipality. Prior to being built, the “applied-for” capacity is included in future capacity.

Future Residential Capacity Equals:

Units from Vacant Land

PLUS

Units from Redevelopment

Units from Proposed and Approved Redevelopments

PLUS

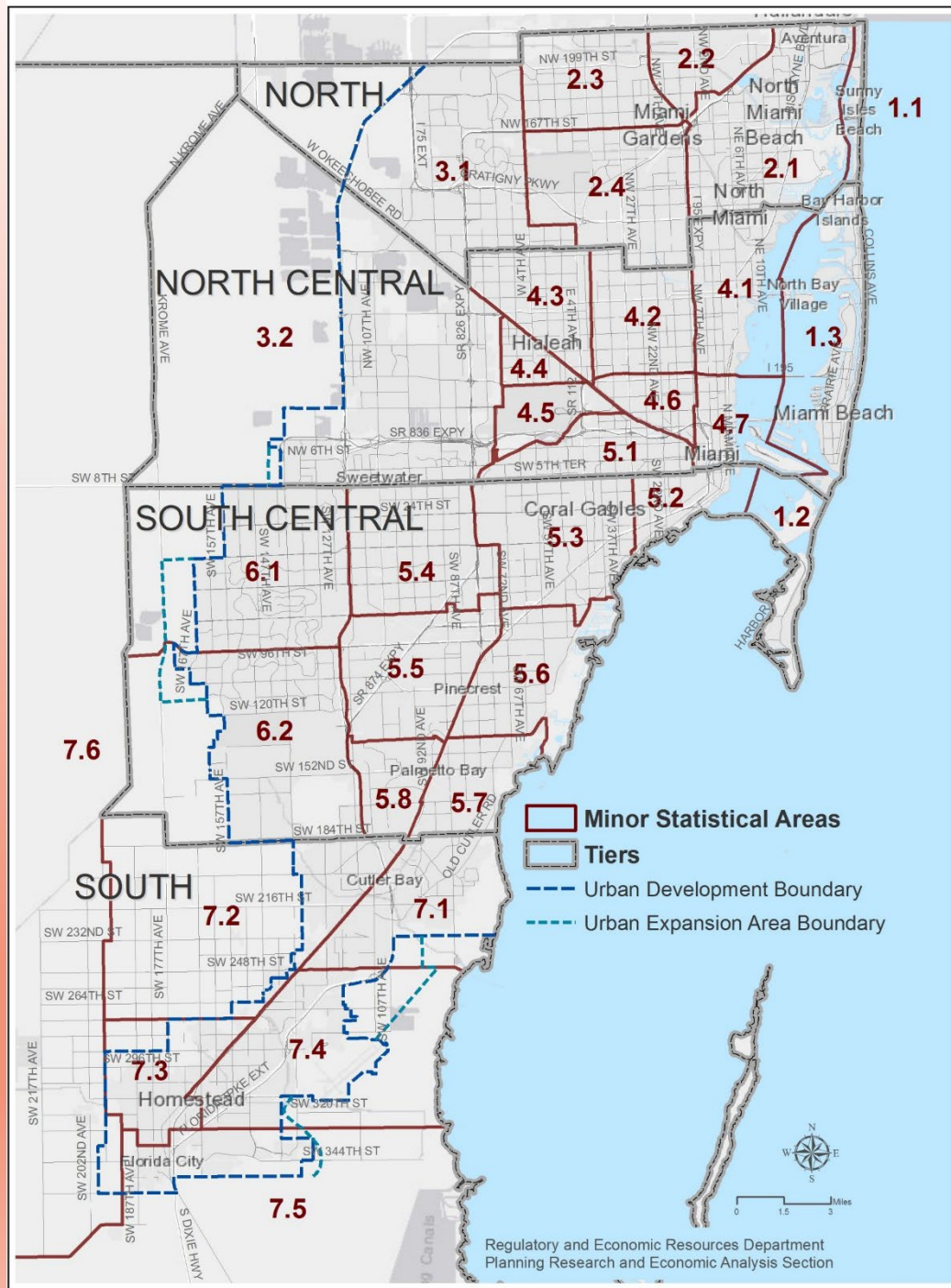
Units from Redevelopment Potential

Units from Redevelopment Potential

- Only existing residential (excluding single-family-type and condominiums), commercial, industrial parcels and parking lots are currently analyzed to evaluate redevelopment potential.
- Only parcels inside the Urban Development Boundary are considered.
- **Requirements:**
 1. The building-to-land value ratio (Building Value/Land Value) must be 0.75 or lower.
 2. The structure must be older than 40 years.
- Based on the net additional number of units, the net-unit increase is assigned a probability of being built (0.25 to 0.99) and then added to future capacity.

Residential Demand Analysis

- Begins with the Countywide and MSA population projections.
- Population projections entail a two-step process:
 1. Using a widely-accepted peer-reviewed component methodology incorporating births, deaths, and international and domestic in-migration and out-migration, a countywide population projection is developed for the planning horizon.
 2. The countywide projected demand is then allocated to each of the 32 minor statistical areas (MSAs) using a mathematical algorithm incorporating historical population trends and the remaining residential capacity in each area.



Regulatory and Economic Resources Department
 Planning Research and Economic Analysis Section

Residential Demand Analysis (continued)

3. The MSA population projections are converted to projected MSA single-family and multifamily housing-unit demand by applying the persons-per-household estimates by housing type from recent Census data.
4. Housing demand is adjusted downward to account for seasonal units using Census data.

Residential Depletion Calculation

Net capacity is then computed in 5-year intervals over the planning horizon.

Net Capacity

$$\begin{aligned} &= \text{Total Adjusted Capacity} \\ &\quad \text{of Housing Units} \\ &- \text{Total Adjusted Demand} \\ &\quad \text{for Housing Units} \end{aligned}$$

The year when **Total Adjusted Capacity = 0** is defined as the **Depletion Year**.

Summary

1. **Future Residential Capacity** in units is calculated from vacant land, proposed/approved development and potential redevelopment.
2. **Population projections** are developed for MSAs and countywide. These are then converted to housing-unit demand using Census data ratios.
3. **Future capacity** is compared to **projected demand** by MSAs and county-wide to calculate the **depletion years**.

Residential Land Supply/Demand Analysis Miami-Dade County, 2025 to 2040

Analysis Done Separately for Each Type, i.e. No Shifting of Demand between Single & Multifamily Type	Structure Type		
	Single Family	Multi- Family	Both Types
Capacity in 2025	20,577	372,840	393,417
Annual Demand in 2025-2030	4,678	4,987	9,665
Capacity in 2030	0	347,905	345,092
Annual Demand in 2030-2035	4,474	4,888	9,362
Capacity in 2035	0	323,465	298,282
Annual Demand in 2035-2040	4,200	4,622	8,822
Capacity in 2040	0	300,355	254,172
Depletion Year	2029	2040+	2040+

Source: Miami-Dade County, Department of Regulatory and Economic Resources, Research and Economic Analysis Section, July 2025.

Non-Residential Capacity and Demand

Overview

- Commercial capacity and demand projections are measured by acreage of land use in commercial activities.
- Commercial Land-Use includes:

Retail Trade

Wholesale Trade

Finance, Insurance, Real Estate and Rental and Leasing

Professional and Business Services

Education and Health Services

Leisure and Hospitality

Other Services

Methodology

The first step in projecting future demand for commercial land is to obtain control totals or projections for:

Commercial Acreage

Miami-Dade Land use GIS Files

Commercial Employment

**US Bureau of Labor Statistics
Quarterly Census of Employment
and Wages (QCEWS)**

Population

**Planning Research & Economic
Analysis**

Methodology

Based on analysis of North American Industrial Classification System (NAICS) by Sector, and for the purposes of estimating the control totals, Commercial Employment includes:

100% of Employment in Retail Trade; Finance, Insurance, Real Estate and Rental and Leasing

95% of Employment in Information

75% of Employment in Professional and Business Services; Education and Health Services; Leisure and Hospitality; and Other Services

8% of Employment in Wholesale Trade

Methodology

1. Using the control totals noted above, a linear regression is run to estimate **Commercial Demand Coefficients** from historic Commercial Acreage and Commercial Employment totals.
2. The regression coefficients obtained in step one above, **Commercial Demand Coefficients**, are then applied to employment projections independently derived by Planning Research and Economic Analysis staff, to generate the projected demand for commercial land acreage.

Methodology

Next, the projected countywide demand for commercial land is allocated to each MSA.

The 20-year historical trend of the average annual change for “in-use” commercial land is calculated in each MSA. The change is either positive, negative or zero.

- If this average change is negative or zero, the MSA’s share of projected countywide demand is set to zero.
- If the average change is positive the MSA’s “in-use” growth rate is averaged with the population growth rate to ensure the fastest growing MSAs will capture the largest share of projected commercial demand growth.

Methodology

Finally, the projected demand for commercial land in each Tier and MSA is the basis for absorption rate to be applied to the current physical supply of commercial land.

The result is a depletion year for commercial land uses by MSA, tier, and countywide to be used in the CDMP amendment process.

Summary

1. **Historical control totals or projections** are developed for commercial acreage, employment, and population.
2. Utilizing the historical control totals for population and employment, a linear regression is run to estimate **commercial demand coefficients**.
3. The commercial demand coefficients are applied to the population and employment projections to calculate **projected demand for commercial land**.
4. Based on the growth of “in-use” commercial land and population growth rates, projected demand for commercial land is **allocated across MSAs**.
5. Projected demand for commercial land is compared to the physical supply to calculate the depletion years for MSAs, tiers, and countywide.

COMMERCIAL

NON-RESIDENTIAL

PROJECTED ABSORPTION OF COMMERCIAL LAND
MIAMI-DADE COUNTY, FLORIDA 2025- 2040

Tier and Minor Statistical Area	Vacant Commercial Land 2025 (Acres)	Commercial Land in Use 2025 (Acres)	Avg Annual Absorption Rate 2025-2040 (Acres)	Projected Year of Depletion	Commercial Land per Thousand Persons	
					2030 (Acres)	2040
North Tier						
1.1	0.33	40.40	0.00	2040+	1.6	1.5
2.1	43.09	1,035.50	0.03	2040+	5.5	5.3
2.2	8.18	236.30	0.00	2040+	3.6	3.6
2.3	22.82	306.50	0.05	2040+	3.8	3.7
2.4	25.40	433.90	0.01	2040+	5.3	5.1
3.1	<u>526.09</u>	<u>916.30</u>	<u>0.05</u>	<u>2040+</u>	<u>5.9</u>	<u>5.7</u>
Total	625.91	2,968.90	0.15	2040+	5.1	4.9
North Central Tier						
1.3	6.54	207.60	0.00	2040+	2.0	2.0
3.2	147.49	1,446.90	0.04	2040+	8.1	7.6
4.1	29.17	340.20	0.01	2040+	4.1	4.0
4.2	30.43	400.40	0.04	2040+	4.3	3.8
4.3	4.39	641.90	0.00	2040+	5.8	5.8
4.4	3.91	54.70	0.00	2040+	3.6	3.6
4.5	27.50	202.40	0.01	2040+	--	--
4.6	23.87	254.80	0.02	2040+	4.8	4.3
4.7	33.88	227.20	0.09	2040+	2.5	1.9
5.1	<u>9.25</u>	<u>423.00</u>	<u>0.01</u>	<u>2040+</u>	<u>3.1</u>	<u>3.0</u>
Total	316.43	4,199.10	0.21	2040+	4.9	4.5
South-Central Tier						
1.2	1.52	75.20	0.00	2040+	4.9	4.9
5.2	4.69	189.80	0.03	2040+	1.9	1.7
5.3	11.19	560.50	0.02	2040+	4.0	3.8
5.4	6.63	558.80	0.00	2040+	5.6	5.6
5.5	2.87	552.70	0.01	2040+	6.1	6.0
5.6	0.19	210.60	0.00	2040+	6.3	6.3
5.7	2.68	246.00	0.00	2040+	9.0	8.6
5.8	0.72	98.40	0.00	2040+	2.5	2.4
6.1	8.37	513.10	0.01	2040+	2.6	2.6
6.2	<u>43.19</u>	<u>609.80</u>	<u>0.20</u>	<u>2040+</u>	<u>3.8</u>	<u>3.7</u>
Total	82.05	3,614.90	0.27	2040+	4.0	3.9
South Tier						
7.1	38.34	300.20	0.02	2040+	4.1	3.8
7.2	64.60	212.60	0.06	2040+	4.4	3.8
7.3	42.27	195.00	0.02	2040+	4.7	4.1
7.4	94.96	432.30	0.21	2040+	4.3	3.8
7.5	96.71	191.60	0.04	2040+	6.9	6.0
7.6	<u>0.00</u>	<u>4.70</u>	<u>0.02</u>	<u>---</u>	<u>0.3</u>	<u>0.2</u>
Total	336.88	1,336.40	0.36	2040+	4.4	3.9
Grand Total	1,361.3	12,119.3	1.0	2040+	4.6	4.3

Source: Miami-Dade County, Department of Regulatory and Economic Resources, Planning Division, Research Section, July 2025.

Methodology

The methodology for projecting demand for industrial land is very similar to that for commercial land. The first step in is to obtain historical control totals or projections for:

Industrial Acreage

Miami-Dade Land use GIS Files

Industrial Employment

**US Bureau of Labor Statistics
Quarterly Census of Employment
and Wages (QCEWS)**

Methodology

The historical industrial acreage and employment data allow for the calculation of the ratio of industrial land to industrial employee, the **Industrial Demand Ratio**.

(Avg. Annual Industrial Acreage/Avg. Annual Industrial Employment)

This Industrial Demand Ratio is applied to the industrial employment projections independently derived by the Planning Research and Economic Analysis staff to generate the countywide projected demand for industrial land.

Methodology

Industrial employment is defined as:

100% of Manufacturing employment

92% of Wholesale Trade employment

30% of Construction employment

20% of Transportation and Warehousing employment

15% of Other Services employment

Methodology

Next, the countywide projected demand for industrial land is allocated across each MSA.

The historical trend of the average annual change for “in-use” industrial land is calculated in each MSA. The change is either positive, negative or zero.

- If this average change is negative or zero, the MSA’s share of projected countywide demand growth is set to zero.
- For all the MSAs where the average change is positive, the growth in countywide demand for industrial land is allocated proportionately to each according to its historic “in-use” rate of growth.

Methodology

Finally, the projected demand for industrial land in each Tier and MSA is the basis for an absorption rate to be applied to the physical supply of industrial land.

The result is a depletion year for industrial land uses by MSA, tier and countywide to be used in the CDMP amendment process.

Summary

1. **Historical control totals** are developed for industrial acreage and employment.
2. Utilizing the historical control totals, an **industrial demand ratio** is calculated.
3. The industrial demand ratio is applied to the employment projections to calculate **projected demand for industrial land**.
4. Based on the growth of “in-use” industrial land, projected demand for industrial land is **allocated across MSAs**.
5. Projected demand for industrial land is compared to the physical supply to calculate the depletion years for MSAs, tiers, and countywide.

INDUSTRIAL

NON-RESIDENTIAL

PROJECTED ABSORPTION OF INDUSTRIAL LAND MIAMI-DADE COUNTY, FLORIDA 2025 - 2040

Tier and Minor Statistical Area	Vacant Industrial Land 2025 (Acres)	Industrial Land in Use 2025 (Acres)	Avg Annual Absorption Rate 2025-2040 (Acres)	Projected Year of Depletion
North Tier				
1.1	0.00	0.87	0.04	2025
2.1	5.35	305.18	0.00	--
2.2	4.25	149.74	0.00	--
2.3	126.67	252.06	10.09	2037
2.4	83.23	1938.76	21.89	2028
3.1	<u>95.12</u>	<u>1741.80</u>	<u>32.73</u>	<u>2027</u>
Total	314.62	4,388.41	64.75	2029
North Central Tier				
1.3	0.00	3.91	0.00	--
3.2	510.88	6512.81	56.65	2034
4.1	1.86	164.01	0.12	2040+
4.2	27.53	786.74	1.28	2040+
4.3	0.63	508.84	0.00	--
4.4	0.00	3.68	0.00	--
4.5	0.22	113.58	0.00	--
4.6	15.26	320.88	0.14	2040+
4.7	3.23	96.69	0.00	--
5.1	<u>0.00</u>	<u>33.06</u>	<u>0.00</u>	<u>--</u>
Total	559.61	8,544.20	58.18	2034
South-Central Tier				
1.2	0.00	0.00	0.00	--
5.2	0.00	4.61	0.00	--
5.3	4.59	47.25	0.00	--
5.4	0.54	155.57	0.83	2025
5.5	0.00	79.01	0.00	--
5.6	0.00	14.50	0.06	2025
5.7	0.00	2.08	0.00	--
5.8	0.00	11.45	0.00	--
6.1	0.00	12.22	0.54	2025
6.2	<u>69.33</u>	<u>652.25</u>	<u>7.19</u>	<u>2034</u>
Total	74.46	978.94	8.62	2033
South Tier				
7.1	0.00	21.81	0.00	--
7.2	10.90	320.30	2.84	2028
7.3	30.71	134.95	0.19	2040+
7.4	108.92	147.45	5.43	2040+
7.5	146.15	242.43	5.80	2040+
7.6	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>	<u>--</u>
Total	296.68	866.94	14.26	2040+
Grand Total	1,245.37	14,778.49	145.80	2033

-- Insignificant Demand

Source: Miami-Dade County, Department of Regulatory and Economic Resources, Planning Division, Research Section, July 2025.

Questions?



**Regulatory and Economic Resources Department
Planning Research and Economic Analysis Section**