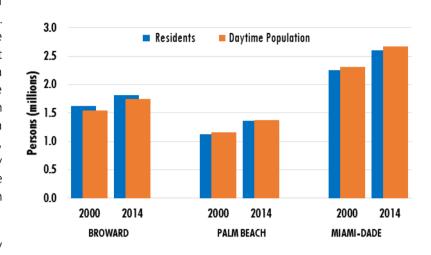


## DAYTIME POPULATIONS

Broward County experiences a net loss of population during the daytime, because many residents commute to neighboring counties. Within the County, Fort Lauderdale, Pompano Beach, Deerfield Beach and Pembroke Park experience a net increase.

### DAYTIME POPULATION

Total population is usually expressed as the number of permanent residents living in a city or county. However, in the daytime, the population may be significantly higher or lower than the resident population. For example, downtown areas may gain large numbers of suburban commuters during the daytime. The US Census calculates daytime population based on the number of people who are present in an area during normal business hours, including workers, children in school, people in hospitals, temporary lodgers, and retail customers. It does not include visitors (tourists) or college students, unless they live in the area.



According to 2014 American Community Survey estimates (ACS), Broward County has 1.82 million

residents, but during the daytime the population is only 1.74 million. Broward is a net exporter of labor force, since there are fewer jobs in the county than workers. Many workers commute from Broward to the adjoining counties--Miami-Dade and Palm Beach—both of which show higher daytime population than residents. For Broward County, this trend has barely changed since 2000, where data shows a net daytime population loss of 73,272 due to commuters compared to a loss of 71,980 in 2014.

### **EMPLOYMENT-RESIDENCE RATIO**

Another way of looking at daytime population data is through the employment-resident (E-R) ratio. The E-R ratio is an indicator of the jobs-to-workers balance in an area. A value greater than 1.00 shows there are more employees working in the area than living there (net importer of labor). A value of less than 1.00 in areas shows that there are more workers commuting to other areas because there are fewer jobs available (net exporters of labor). A similar measure, the jobs-to-housing (J-H) ratio, measures number of local jobs against number of housing units. The J-H ratio has been used in studies to make a case for more balanced mix of residential and employment uses within close proximity of each other to help shorten commutes. Unfortunately, neither the E-R nor J-H ratios quantify whether the residents are actually working within their own area or commuting elsewhere. Workers' skills aren't necessarily matched to jobs closest to where they live. Meanwhile, employment centers may not provide housing that

is affordable to the employees in the area. Despite a semblance of E-R balance, the skills/affordability mismatch may promote longer commutes.

COUNTY	BROWARD		PALM	BEACH	MIAMI-DADE	
COUNTI	2000	2014	2000	2014	2000	2014
Total Residents	1,623,018	1,815,269	1,131,184	1,359,074	2,253,362	2,600,861
Total Workers (aged 16+)	670,271	778,671	499,268	608,032	956,458	1,219,954
Residents in labor force	743,543	850,651	475,572	591,057	899,323	1,150,052
Daytime population	1,549,746	1,743,289	1,154,880	1,376,049	2,310,497	2,670,763
Net change due to commuters	-73,272	-71,980	23,696	16,975	57,135	69,902
Employment Residence Ratio	0.90	0.92	1.05	1.03	1.06	1.06

Sources: U.S. Census Bureau, 2000; U.S. Census Bureau, 2010-2014 5-Year American Community Survey





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Of the three counties, Broward has the lowest employment-residence (E-R) ratio (number of workers working in a county relative to workers living in that county). E-R ratio of 0.92 means that, in net terms, Broward exports 8% of its workers to other counties. While this trend existed in 2000, the data shows that the export of its workers decreased from 10% to 8% (2014).

### DAYTIME POPULATIONS IN BROWARD COUNTY CITIES

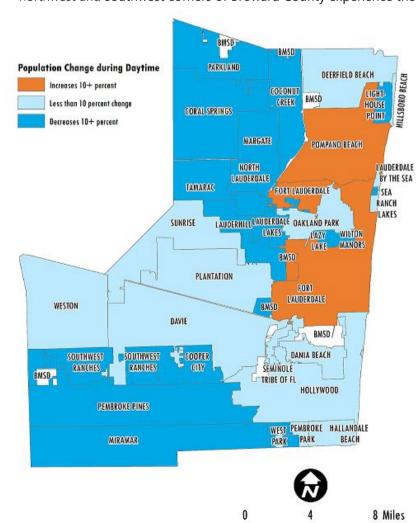
The daytime populations of municipalities in Broward differ considerably from their resident populations. During the daytime, Fort Lauderdale's population increases by more than 84,000, whereas Pembroke Pines decreases by over 27,000.

The eastern Broward cities of Fort Lauderdale, Pompano Beach, and Deerfield Beach gain the most daytime population. Communities with the least change between resident and daytime populations are generally located in central parts of the county, along the I-595 corridor or in the southeast. Cities in the

MUNICIPALITIES THAT GAIN DAYTIME POPULATION, 2014								
Municipality	Resident Population	Daytime Population	Net Commuters	Net Daytime Change				
Fort Lauderdale	171,137	255,610	84,473	49%				
Pompano Beach	103,234	119,891	16,657	16%				
<b>Deerfield Beach</b>	77,341	81,059	3,718	5%				
Pembroke Park	6,220	6,301	81	1%				

Source: U.S. Census Bureau, 2010-2014 5-Year American Community Survey

northwest and southwest corners of Broward County experience the greatest loss of the daytime population.



# MAPPING NET DAYTIME POPULATION CHANGES

The map to the left shows cities that lose more than 10% population in the daytime in darker blue. Cities that gain more than 10% daytime population are shown in orange. Light blue represents little change (less than 10%). Since the data is place-based and some of the unincorporated areas are not, there is no data available for areas shown in white.

Of note, the Fort Lauderdale-Hollywood International Airport (FLL) located in the east central part of the County is one example of a large attractor that is not a census place. Each day over 73,000 travelers pass through the four terminals at FLL. Airport employees include 12,500 badged workers. Other blank areas on the map represent County facilities, including waste management facilities.

Daytime population is often used to understand traffic and commuter patterns. However, this map illustrates that while data may not be readily available for nonplaces, it is important to understand their role in attracting daytime population, since they may include important employment facilities.



### **VISITORS IMPACTS**

Visitors and out of state students are a source of non-permanent population in Broward County that also affect daytime populations. According to Greater Fort Lauderdale Convention and Visitors Bureau, there were 15.4 million visitors to Broward County in 2015. The numbers of visitors to Broward County varies according to time of year. Rather than simply assume a constant rate of 1.28 million visitors per month, a proxy value of monthly tourist tax collection from 2007 – 2015 was used to illustrate the busiest periods annually for visitors to Broward County. The highest periods of visitors to Broward County generally falls between December and April. Using both set of peak months for the 9 year period, on average 45% of total tourist tax collection occurs during these months. The graph also shows that 2009 was the year with the lowest tourist tax revenue.

#### \$8,000,000 \$7,000,000 \$6,000,000 \$5,000,000 \$4,000,000 \$3,000,000 \$2,000,000 \$1,000,000 **\$0** MAR JAN FEB JUN JUL AUG NOV DEC 2007 - 2008 -2009 2010 -- 2011 ----- 2012 **--**-2013 —— 2014 —

### BROWARD COUNTY TOTAL TOURIST TAX COLLECTIONS BY MONTH 2007 - 2015

Another potential indicator to indirectly measure the impacts on visitors throughout the County is the measure of the number of seasonal, recreation or occasional use housing units (seasonal units). According to 2014 ACS, 9.3% of housing units in Broward County are seasonal units and 14 of the cities in the County have higher rates of seasonal units than the County. The top four cities with highest percentage of seasonal units include Hillsboro Beach (52.3%), Lauderdale-by-the-Sea (38%), Pembroke Park (30%) and Hallandale Beach (29%). The city with the highest number of seasonal units is Fort Lauderdale with 11,600 units. While some cities may not have increased daytime populations due to worker commutes, they might be experiencing increased population seasonal volumes due to visitors.

### **STUDENTS**

As stated at the beginning of this BBTN, college students are not included in the daytime population data, unless they live in the area. According to 2014 ACS, there are 139,091 people age 15 and over enrolled in college or graduate school. It should be noted that some, but not all, are out of state students. According to U.S. Department of Education, National Center for Education Statistics 16% of first-time degree/certificate-seeking undergraduates in degree-granting postsecondary institutions in the state of Florida are out of state students. Based on the assumption that this same rate applies in Broward County, there are approximately 22,255 out of state students.

Colleges, universities and other centers of higher learning are large traffic generators, and most educational facilities do not provide on-site campus housing. A few students may be traveling short distances from surrounding communities or neighborhoods. However, there is as much or more likelihood that they are traveling longer distances from other counties they call home. Since housing is expensive, many college students are living at home to cut down costs. As in the case of the Fort Lauderdale-Hollywood International Airport (FLL), it is important to understand these daytime attractors, as well.





TABLE 1: BROWARD COUNTY CITIES COMMUTER-ADJUSTED DAYTIME POPULATION									
City	Total resident population	Total workers <sup>2</sup> working in place <sup>3</sup>	Total workers living in place <sup>4</sup>	Estimated daytime population	Daytime population change due to commuting <sup>6</sup>	% daytime population change due to commuting?	Workers who lived and worked in the same place <sup>8</sup>	% workers who lived and worked in the same place <sup>9</sup>	Employme nt residence ratio <sup>10</sup>
Coconut Creek	55,590	17,604	26,816	46,378	-9,212	-16.57	4,686	17.5	0.66
Cooper City	32,058	8,373	16,649	23,782	-8,276	-25.82	2,662	16.0	0.50
Coral Springs	125,150	41,953	62,480	104,623	-20,527	-16.40	18,378	29.4	0.67
Dania Beach	30,531	11,145	13,756	27,920	-2,611	-8.55	1,445	10.5	0.81
Davie	95,721	40,344	46,984	89,081	-6,640	-6.94	9,432	20.1	0.86
Deerfield Beach	77,341	37,665	33,947	81,059	3,718	4.81	8,499	25.0	1.11
Fort Lauderdale	171,137	165,675	81,202	255,610	84,473	49.36	37,313	46.0	2.04
Hallandale Beach	38,270	14,031	15,901	36,400	-1,870	-4.89	3,198	20.1	0.88
Hillsboro Beach	1,635	389	550	1,474	-161	-9.85	151	27.5	0.71
Hollywood	145,128	65,577	67,921	142,784	-2,344	-1.62	19,301	28.4	0.97
Lauderdale Lakes Lauderdale-by-the-	33,710	7,083	14,161	26,632	-7,078	-21.00	1,184	8.4	0.50
Sea	6,241	2,017	2,427	5,831	-410	-6.57	376	15.5	0.83
Lauderhill	69,082	12,302	29,545	51,839	-17,243	-24.96	2,971	10.1	0.42
Lazy Lake	35	4	17	22	-13	-37.14	4	23.5	0.24
Lighthouse Point	10,693	3,793	5,280	9,206	-1,487	-13.91	1,148	21.7	0.72
Margate	54,929	16,307	26,023	45,213	-9,716	-17.69	4,288	16.5	0.63
Miramar	128,414	38,898	61,861	105,451	-22,963	-17.88	8,524	13.8	0.63
North Lauderdale	42,354	6,362	20,155	28,561	-13,793	-32.57	2,122	10.5	0.32
Oakland Park	42,795	19,790	21,968	40,617	-2,178	-5.09	3,585	16.3	0.90
Parkland	25,895	4,296	12,293	17,898	-7,997	-30.88	2,109	17.2	0.35
Pembroke Park	6,220	2,530	2,449	6,301	81	1.30	91	3.7	1.03
Pembroke Pines	159,920	47,831	75,048	132,703	-27,217	-17.02	14,166	18.9	0.64
Plantation	88,486	42,868	44,770	86,584	-1,902	-2.15	10,025	22.4	0.96
Pompano Beach	103,234	59,016	42,359	119,891	16,657	16.14	14,326	33.8	1.39
Sea Ranch Lakes	737	175	314	598	-139	-18.86	32	10.2	0.56
Southwest Ranches	7,583	1,264	3,810	5,037	-2,546	-33.58	473	12.4	0.33
Sunrise	88,391	43,274	43,349	88,316	-75	-0.08	8,605	19.9	1.00
Tamarac	62,478	17,458	28,482	51,454	-11,024	-17.64	3,758	13.2	0.61
West Park	14,604	2,004	6,244	10,364	-4,240	-29.03	352	5.6	0.32
Weston	67,567	23,863	30,020	61,410	-6,157	-9.11	7,707	25.7	0.79
Wilton Manors	11,994	4,339	6,303	10,030	-1,964	-16.37	1,227	19.5	0.69
BMSD AREAS									
Central County	6,944	3187	2,331	7,800	856	12.33	95	4.1	1.37
Broadview Park	7,175	748	4,027	3,896	-3,279	-45.70	254	6.3	0.19
Hillsboro Pines	511	129	232	408	-103	-20.16	67	28.9	0.56

NOTES (1) Total resident population — the total number of persons living in the area as shown in American Community Survey.

- (2) Workers people 16 years and over who were employed and at work during the reference week. The estimate of workers includes part-time and full-time civilian personnel and people in the Armed Forces.
- (3) Total workers working in the place this is the number of workers who reported working in the place, regardless of their place of residence. In other words, it is the total that worked there no matter where they lived. Residence locations are not considered, only workplace locations are reflected in this number.
- (4) Total workers living in the place this is sometimes referred to as the number of resident workers. It is the number of people living in the place who are workers. It includes workers who live there regardless of where they worked, or in other words, no matter where their workplace was located. Place of work location is not considered, only residence location is reflected in this number.
- (5) Estimated daytime population this is the estimate arrived at by adjusting the total resident population by the number of incommuters and outcommuters to the place, using data from the American Community Survey. It does not adjust for people entering or leaving the place for purposes other than commuting, nor does the commuting adjustment take the time of day of the work trips into account. The estimate is calculated by adding the total resident population and the total workers working in the place, and then subtracting from that result the total workers living in the place. This method yields the same result as would be obtained by adding the incommuters and subtracting the outcommuters from the total resident population.
- (6) Daytime population change due to commuting this is the numeric increase or decrease in the population of the area as a result of work-related commuting. It is the net change in the population due to work travel and is computed by subtracting the total resident population from the estimated daytime population. Positive numbers indicate more commuters entering the area than leaving it. Negative numbers occur when more workers leave the area to go to work than enter it to come to work.
- (7) Percent daytime population change due to commuting this is the percentage increase or decrease in the population of the place as a result of work-related commuting. It is calculated by dividing the numeric change due to commuting by the total resident population, and multiplying the result by 100. Positive figures denote the percentage increase experienced by the population, while negative numbers show the percentage decrease in the population as a result of commuting.
- (8) Workers who lived and worked in the same place this value shows how many workers who lived in a particular place also worked in that same place. It is derived from place of residence location information and responses to the question on workplace location during the week prior to filling out the American Community Survey questionnaire.





(9) Percent workers who lived and worked in the same county — this measure is sometimes used as an indicator of worker retention, but it does not reflect variation in area size (some places cover a large area while others are small) or other attributes very well. It is computed by dividing the number of workers who lived and worked in the same place by the total workers living there and multiplying the result by 100.

(10) Employment-residence (E-R) ratio — this is a measure of the total number of workers working in the place, relative to the total number of workers living in the place. It is often used as a rough indication of the jobs-workers balance in an area, although it does not take into account whether the resident workers possess the skills needed for the jobs that are available. E-R ratios greater than 1.00 occur when there are more workers working in the place than living there. These places can be considered as net importers of labor. For example, an E-R ratio of 1.19 means that there are 19 percent more workers working in the place than living in the place. Values less than 1.00 indicate areas that send more workers to other areas than they receive, i.e., they are net exporters of labor. Source: U.S. Census Bureau, 2010-2014 American Community Survey 5-year estimates.

TABLE 2: BROWARD COUNTY TOTAL TOURIST TAX COLLECTIONS BY MONTH 2007 - 2015									
MONTH	2007	2008	2009	2010	2011	2012	2013	2014	2015
JAN	\$4,345,156	\$4,727,356	\$3,983,280	\$3,890,877	\$4,055,687	\$4,662,492	\$5,085,933	\$5,764,901	\$6,485,370
FEB	\$5,497,558	\$5,526,053	\$4,429,125	\$5,074,860	\$4,768,340	\$5,352,291	\$5,510,358	\$6,221,929	\$7,088,533
MAR	\$5,345,425	\$5,494,124	\$4,031,730	\$4,505,420	\$5,200,449	\$5,555,001	\$6,352,084	\$6,768,443	\$7,410,655
APR	\$3,768,602	\$4,162,768	\$3,105,609	\$3,240,869	\$4,056,038	\$3,981,888	\$4,226,186	\$4,952,092	\$5,459,887
MAY	\$3,175,486	\$2,980,340	\$2,616,786	\$2,805,064	\$3,130,661	\$3,324,950	\$3,413,741	\$3,782,816	\$4,045,323
JUN	\$2,501,180	\$2,492,245	\$2,117,555	\$2,331,264	\$2,616,264	\$2,801,721	\$3,127,373	\$3,380,263	\$3,618,224
JUL	\$2,593,816	\$2,344,638	\$2,253,356	\$2,419,946	\$2,766,325	\$2,971,827	\$3,185,406	\$3,565,976	\$3,885,598
AUG	\$2,467,887	\$2,287,439	\$2,023,234	\$2,112,759	\$2,386,001	\$2,561,865	\$2,876,350	\$3,345,489	\$3,474,977
SEP	\$1,999,655	\$1,824,991	\$1,611,029	\$1,733,388	\$2,061,380	\$2,214,417	\$2,335,376	\$2,675,355	\$2,991,525
ОСТ	\$2,953,313	\$2,658,761	\$2,263,749	\$2,628,799	\$2,858,378	\$3,146,023	\$3,224,004	\$3,695,371	\$3,944,613
NOV	\$2,957,165	\$2,898,646	\$2,367,004	\$2,589,804	\$2,996,037	\$3,209,901	\$3,796,454	\$4,099,543	\$4,725,906
DEC	\$3,651,430	\$3,222,053	\$2,819,720	\$3,213,873	\$3,740,525	\$4,070,978	\$4,565,317	\$5,183,258	\$5,581,266

Source: Broward County Finance and Administrative Services Department, Records, Taxes and Treasury Division



TABLE 3:MUNICIPALITIES WITH HIGHER PERCENTAGE OF SEASONAL UNITS THAN BROWARD COUNTY							
	Total Housing Units	For seasonal, recreational, or occasional use	% of Total Housing Units				
Hillsboro Beach	2,204	1,152	52.3%				
Lauderdale-by-the-Sea	6,848	2,582	37.7%				
Pembroke Park	4,028	1,213	30.1%				
Hallandale Beach	28,687	8,422	29.4%				
Sea Ranch Lakes	356	68	19.1%				
Deerfield Beach	41,842	6,887	16.5%				
Pompano Beach	55,962	9,006	16.1%				
Hillsboro Pines	208	32	15.4%				
Lauderdale Lakes	14,763	2,174	14.7%				
Dania Beach	15,701	2,258	14.4%				
Lighthouse Point	6,155	822	13.4%				
Fort Lauderdale	94,610	11,632	12.3%				
Hollywood	70,719	7,320	10.4%				
Weston	25,474	2,592	10.2%				
<b>Broward County</b>	812,817	75,778	9.3%				

Source: U.S. Census Bureau, 2010-2014 5-Year American Community Survey



TABLE 4: BROWARD COUNTY CITIES SEASONAL, RECREATIONAL OR OCCASIONAL USE HOUSING UNITS						
	Total Housing Units	For seasonal, recreational, or occasional use	% of Total Housing Units			
Broward County	812,817	75,778	9.3%			
Coconut Creek	26,408	2,062	7.8%			
Cooper City	10,940	32	0.3%			
Coral Springs	44,246	652	1.5%			
Dania Beach	15,701	2,258	14.4%			
Davie	37,427	1,550	4.1%			
Deerfield Beach	41,842	6,887	16.5%			
Fort Lauderdale	94,610	11,632	12.3%			
Hallandale Beach	28,687	8,422	29.4%			
Hillsboro Beach	2,204	1,152	52.3%			
Hollywood	70,719	7,320	10.4%			
Lauderdale Lakes	14,763	2,174	14.7%			
Lauderdale-by-the-Sea	6,848	2,582	37.7%			
Lauderhill	28,599	2,114	7.4%			
Lazy Lake	12	0	0.0%			
Lighthouse Point	6,155	822	13.4%			
Margate	24,579	1,769	7.2%			
Miramar	41,388	994	2.4%			
North Lauderdale	13,963	346	2.5%			
Oakland Park	19,705	909	4.6%			
Parkland	8,507	222	2.6%			
Pembroke Park	4,028	1,213	30.1%			
Pembroke Pines	63,098	2,502	4.0%			
Plantation	37,478	1,396	3.7%			
Pompano Beach	55,962	9,006	16.1%			
Sea Ranch Lakes	356	68	19.1%			
Southwest Ranches	2,358	128	5.4%			
Sunrise	36,973	2,304	6.2%			
Tamarac	31,783	1,770	5.6%			
West Park	4,320	52	1.2%			
Weston	25,474	2,592	10.2%			
Wilton Manors	7,196	336	4.7%			
	BMSD AF	REAS				
Central County	2,425	0	0.0%			
Broadview Park	2,289	80	3.5%			

Source: U.S. Census Bureau, 2010-2014 American Community **Survey 5-year estimates** 

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PLANNING & DEVELOPMENT MANAGEMENT DIVISION

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**Hillsboro Pines** 

15.4%