

City of Virginia Beach

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MUNICIPAL CENTER BUILDING 1 2401 COURTHOUSE DRIVE VIRGINIA BEACH, VA 23456-9001

OFFICE OF THE CITY MANAGER OFFICE (757)-385-4242 FAX (757) 385-5626

August 10, 2018

The Honorable Louis R. Jones, Mayor Members of City Council

Dear Council Members:

RE: Dome Site Consultant Studies

Last fall we were at a point for further analysis for development of the Dome Site. Venture Realty Group, (the developer) and Virginia Beach Development Authority commissioned numerous studies to assess the appropriate analysis and composition for this unique project. The studies are complete and the results give us the confidence in the opportunities of this project. On August 14, each consultant will highlight their findings, and you will have an opportunity for further questions and dialogue.

Attached are the following studies for your review:

- Entertainment Venue Feasibility Study Stone Planning
- 2. Retail Potential and Merchandising Study SiteWorks Retail Real Estate Services
- 3. Displacement & Economic Impact Assessment Lambert Advisory
- Residential & Office Assessment Lambert Advisory
- 5. Shared Parking Analysis Report Desman Design Management

Please do not hesitate to contact me, or Ron Williams, if you have any questions.

Respectfully,

David L. Hansen City Manager

DLH:RHW, Jr.:pam

Attachments

ENTERTAINMENT VENUE FEASIBILITY STUDY

Venture Waves, LLC

Virginia Beach Economic Development Authority

July 2018















July 30, 2018

Mr. Mike Culpepper, Managing Partner and Ms. Donna MacMillan-Whitaker, Founder/Managing Partner Venture Realty Group Virginia Beach, VA

Virginia Beach Economic Development Authority Virginia Beach, VA 23462

Dear Mr. Culpepper, Ms. MacMillan-Whitaker, and the VBEDA:

Stone Planning LLC, The Rooney Sports and Entertainment Group, and Nielsen Sports have completed our feasibility analysis of a potential entertainment venue at the Dome site in Virginia Beach. The attached report presents the results of our research, analysis, findings, and conclusions and recommendations, and is intended to assist Venture Realty Group and the VBEDA in evaluating the viability of the facility.

The analyses presented in this report are based on estimates, assumptions, and other information developed from industry research, data provided by VRG and others, interviews with local and industry stakeholders, and analysis of other facilities and markets. The sources of information and the basis of assumptions, estimates, and forecasts are stated in this report. Some assumptions inevitably will not materialize and unanticipated events and circumstances may occur. Therefore, actual results achieved will vary from those described and the variations may be material.

The findings presented are based on analysis of present and near-term conditions in the Virginia Beach area, as well as existing interest levels by potential users for a new facility. Any significant changes in the characteristics of the local community, such as change in population, corporate inventory, and/or competitive facilities, could materially impact conclusions and recommendations developed in this study. As in all studies of this type, the estimated results are based on competent and efficient management of the potential facility and assume that no significant changes in the event markets or assumed immediate and local area market conditions will occur beyond those set forth in this report. Furthermore, all information provided to us by others was not audited or verified and was assumed to be correct.

This report has been prepared for use by VRG and the VDEDA, and should not be relied upon by any other party. The report has been structured to provide research, conclusions and recommendations, and forecasts to strategically plan for potential new-facility development and should not be used for any other purpose. This report and its findings may not be included or reproduced in any public offering statement or other financing document.

We very much appreciate the assistance and cooperation that has been provided in the completion of this report, and have enjoyed working with you. Should you need anything else, please let us know.

Sincerely,

Stone Planning LLC

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Section 1 **Executive Summary**







EXECUTIVE SUMMARY

Stone Planning, The Rooney Sports and Entertainment Group, and Nielsen Sports were engaged by Venture Realty Group and the Virginia Beach Economic Development Authority to complete a market and financial feasibility analysis of a new multipurpose entertainment venue (Event Center) in Virginia Beach. We have also provided high-level, preliminary analyses of a surf park within the development, based on limited documentation provided to our team. In general, this independent analysis is aimed at understanding the market for a potential new facility, recommending major characteristics of a new facility (if any), and forecasting the future operations and economic impacts of a new facility.

The study analyzes the potential for a new facility in Virginia Beach, including analyses of:

- o the local and regional market that would support a new facility (including both full-time residents and tourists),
- o the events industry,
- o the local environment for competitive and complementary facilities,
- o stakeholder feedback,
- o comparable facilities in other markets,
- o recommendations regarding a new facility, and
- o forecasts of future operations and economic impacts of a recommended facility.

This executive summary provides an overview of the analyses, research, recommendations, and forecasts that appear in the full report.

The Local Market

- Virginia Beach is Virginia's largest city, with more than 450,000 residents, and is part of the larger Hampton Roads metro area with approximately 1.7 million residents. The Designated Market Area, as defined for this study, has 1.5 million residents and is strongly concentrated in Virginia Beach.
- o The DMA is relatively young, affluent, educated, and employed.
- o The DMA population is more likely than the average US market to attend concerts and many other types of entertainment events.
- o In addition to the full-time resident population, Virginia Beach is a major tourist market, with more than 15 million visitors in 2016.







The Events and Facility Industry

- o Entertainment venues have benefitted from technological changes in the music industry that have led to a significant increase in the value of live concerts to a performer's income. As a result, the number of shows has also increased significantly.
- o More than one-third of the top 200 grossing entertainment tours typically sell 5,000 or fewer tickets per show.
- o Locally, the need for a 2,500-to-3,500-seat commercial venue at the beachfront was identified in studies that led to the Sandler Center's development, although no such facility has been built. There appears to be a strong need for this type of facility in the market.
- o The Virginia Beach market has a number of indoor and outdoor venues that host free and ticketed entertainment events throughout the year. However, direct competition with the planned Event Center is expected to be relatively minimal, and any free events at the Event Center are generally expected to complement, and not compete with, the city's Boardwalk programming.

Conclusions and Recommendations

- o We believe that there is a market for both indoor and outdoor events at the capacities being considered (up to approximately 3,200 indoors and 5,000 outdoors). Also, the flexibility for various configurations for indoor events offer artists and promoters a wide variety of options, such as general admission, seated, cabaret, and/or a combination of multiple configurations.
- o The involvement of OVG is considered to be a significant positive factor for the facility, based on the firm's resources and relationships; experience with facility planning, management, and prgoramming; marketing and sponsorships; and other aspects of facility and event operations. In addition, OVG's primary representative for the project has significant experience in the local market.
- o It is likely that most of the commercial events that would be held at the Event Center will be new to the market. However, the Event Center could attract some events that would otherwise be held at existing local facilities such as Chrysler Hall and the NorVa in Norfolk and the Union Bank & Trust Pavilion in Portsmouth.
- o Virginia Beach is well-located for touring events, in relation to markets such as Richmond, Charlotte, Washington DC/Baltimore, and others.
- o The facility's planned open booking policy will help to increase usage and encourage all promoters to book shows. Multiple promoters that are active locally (including those that book and operate existing facilities) have expressed interest in using the new facility.







Operating and Economic Impact Projections

o Based on previous tasks, as well as other research presented in Section 6, we have forecasted the future annual operations of the Event Center. The following table summarizes the estimated annual events and attendance, by event type.

PROJECTED EVENTS AND ATTENDANCE						
	# of Events	Avg. Atten.	Total Atten.			
Concerts - Indoor Reserved	30	2,167	65,000			
Concerts - Indoor GA	40	2,719	108,750			
Concerts - Outdoor	20	3,600	72,000			
Concerts - Minor	40	300	12,000			
Other Ticketed Sports/Entertainment	5	2,250	11,250			
Community Events	32	1,500	48,000			
Private/Social Events	50	250	12,500			
Festivals	3	3,000	9,000			
Surf Park Events	3	500	1,500			
TOTAL	223		340,000			

Source: Stone Planning

o Based on the projected usage and other assumptions, the following table summarizes the Event Center's projected operating revenues and expenses for its first year.

SUMMARY PRO FORMA (\$000S)	
Operating Revenues	_
Event Revenues	\$8,496
Non-Event Revenues	743
Total Operating Revenues	\$9,239
Operating Expenses	
Event Expenses	\$6,641
Non-Event Expenses	1,497
Total Operating Expenses	\$8,138
Net Operating Income (Loss)	\$1,101

Source: Stone Planning

We assume a total of approximately \$9.2 million in revenues and \$8.1 million in expenses, for a resulting net income of \$1.1 million. Over the course of the Event Center's first ten years, net income is assumed to be approximately \$1.0 million to \$1.1 million per year.

o We have also estimated the future economic and fiscal impacts from the operations and construction of the Event Center. Impacts are generally based on spending that is attracted to the city from outside of the city.







SUMMARY OF ECONOMIC/FISCAL IMPACTS FROM OPERATIONS (\$000s)

SOMMAKI OF ECONOMICS 15 CALIMI ACTS 1 KO	11 OI EIGHTIOI13 (\$0003)
Operations (Annual)	
Total Spending - Direct and Indirect	\$18,249
Total Jobs (Full-Time Equivalent)	105
Total Earnings	\$4,398
Room Nights	20,970
New Tax Revenues to the City	\$232
Construction (One-Time)	
Labor Expenditures	\$18,255
Sales of Materials	\$7,947
Employment	314
New Tax Revenues to the City	\$201

Source: Stone Planning

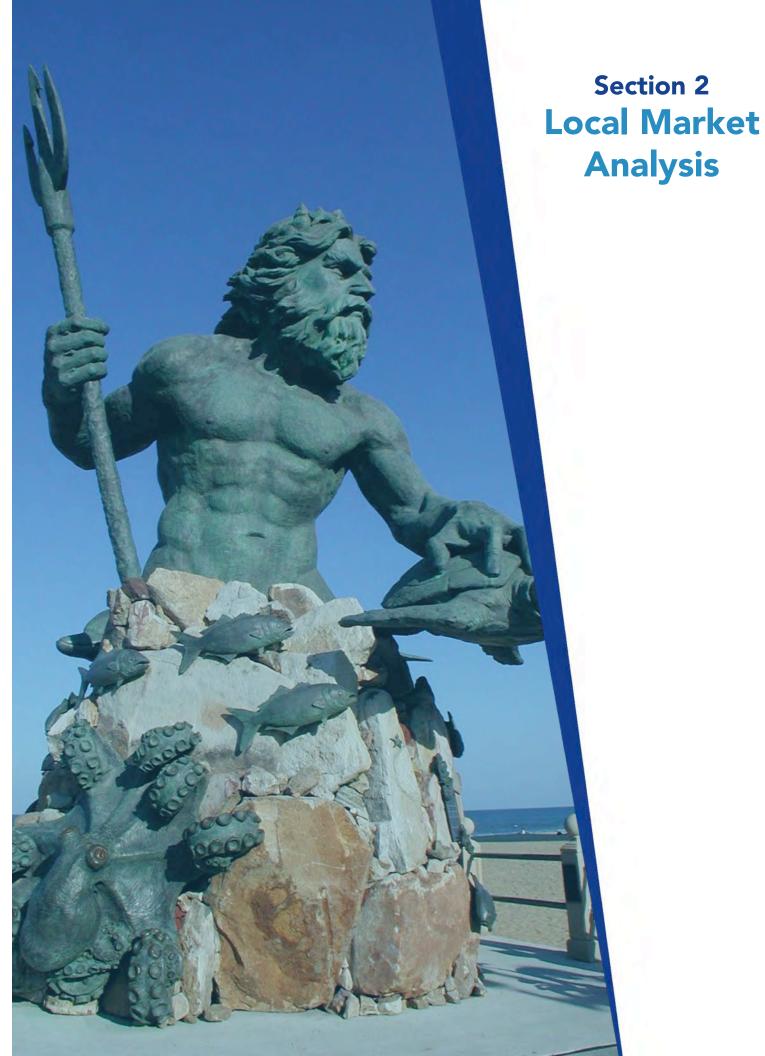
The operational impacts will recur from year to year, and the facility is estimated to generate approximately \$18.2 million in total net spending, 105 jobs and an associated \$4.4 million in earnings, approximately 21,000 hotel room nights, and \$232,000 in city tax revenues per year.

The construction project is estimated to generate a total of approximately \$18.3 million in labor expenditures and 314 jobs, for local residents as well as \$7.9 million in materials sales to local firms.

Surf Park Analysis

We have also completed a high-level analysis of limited information provided by Wavegarden related to the planned surf park. Based on our review of this information and other research, we provide the following observations:

- o Wavegarden's methodologies appear to be sound.
- o Its assumed penetration rates for surf park users (both local residents and tourists) appear to be conservative.
- o Because of the wave technology and the attraction, surfers are expected to travel to Virginia Beach for the facility; these induced visitors are not included in Wavegarden's usage estimates.
- o The facility can also potentially attract additional training and competition uses that are not included in its forecasts.
- o Depending on the proliferation of inland surf parks, a facility in Virginia Beach could potentially become less unique in the future.









In this section, we provide economic and demographic data on the local and regional market (including definitions of the market areas) in order to give context on the environment in which a new entertainment venue would operate, as characteristics of the surrounding population are important to the support of a venue.

VIRGINIA BEACH AND MARKET DEFINITIONS

Incorporated as a city in 1952, Virginia Beach is Virginia's largest city, with more than 450,000 residents. It is an independent city and therefore not part of a larger county, but is within the Hampton Roads metro area that encompasses parts of Virginia and North Carolina including Norfolk (25 miles from Virginia Beach), Newport News (40 miles), Hampton (30 miles), and other cities. The metro area has a population of approximately 1.7 million people, which is the 37th-largest metro area in the country and has a population that is similar to the metro areas of Nashville, Providence, Milwaukee, and Jacksonville.

Virginia Beach is largely known as a resort city due to its location on the Atlantic Ocean and the mouth of Chesapeake Bay. Its oceanfront has miles of beaches and countless hotels, restaurants, and entertainment options. However, in addition to its tourism industry, the city also has multiple military bases, two universities, a large business community with multiple corporate headquarters, and historic significance (it is the site of the first landing of English colonists, in 1607, and near Colonial Williamsburg, Jamestown, and Yorktown).

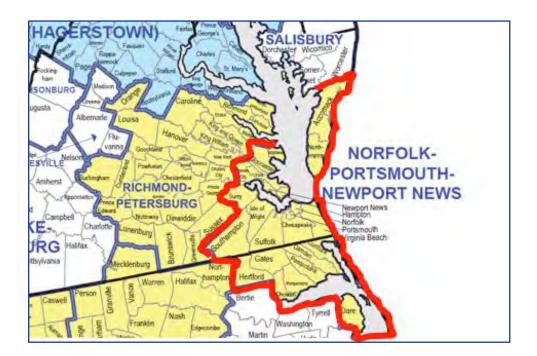
The Nielsen DMA (Designated Market Area) is defined as a group of counties that form a geographic area in which local market television viewership is measured. This is a non-overlapping geography for planning, buying, and evaluation of television audiences across various markets, and is also considered to define the local market for concerts and other events.

The DMA is shown below in red.









POPULATION

The following table shows the DMA's population since 2008.

DMA PO	DMA POPULATION					
Year	Population (000s)					
2008	1,445					
2009	1,440					
2010	1,435					
2011	1,457					
2012	1,454					
2013	1,476					
2014	1,499					
2015	1,509					
2016	1,515					
2017	1,525					

Source: Nielsen Scarborough 2017

The market currently has approximately 1.5 million residents. Overall, population growth has been relatively low, averaging 0.6 percent per year.

The local zip codes with the highest population, and their location, are shown in the table and map below.

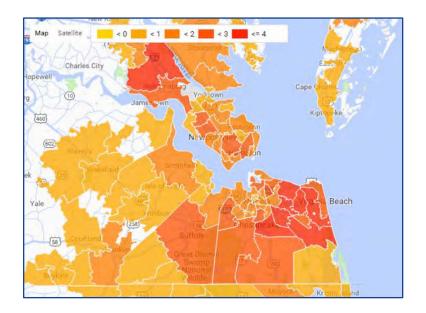






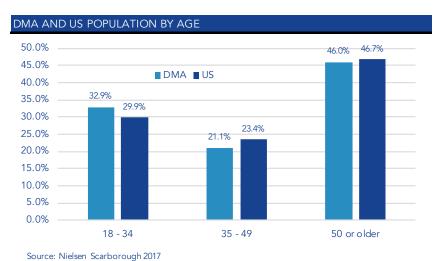
POPULATION BY ZIP CODE						
Zip Code	Population	% of Population				
23464	60,576	4.0%				
23462	56,796	3.7%				
23320	44,122	2.9%				
23455	44,451	2.9%				
23456	43,961	2.9%				
23452	42,600	2.8%				
23188	39,507	2.6%				
23454	40,124	2.6%				
23322	37,758	2.5%				
23608	37,991	2.5%				





AGE

The following graph shows the age distribution of the DMA compared to the US.



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As the graph shows, the DMA is relatively young, as its 18-to-34 population is ten percent greater than that of the US as a whole (approximately 33 percent compared to 30 percent). As a result, it has a lower share of residents between the ages of 35 and 49, and its 50+ population is similar to that of the US.

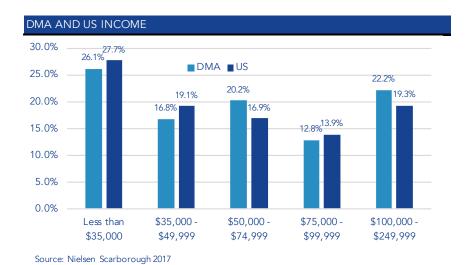






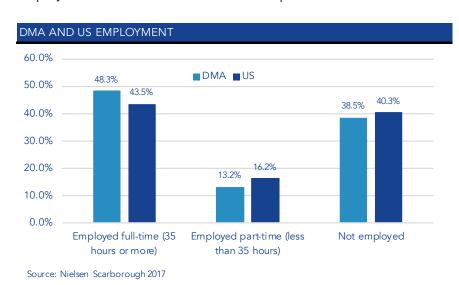
INCOME AND EMPLOYMENT

The following graph shows the DMA's household income levels compared to those of the US.



Compared to the country as a whole, the DMA is overrepresented in two income brackets - \$50,000 to \$75,000 and \$100,000 to \$250,000. Correspondingly, it has a lower share of residents with incomes below \$50,000. Nationwide, the mean household income was approximately \$55,300 in 2016.

Employment status of local residents, compared to that of the US, is shown below.









Consistent with relatively high income levels, the share of local residents who are employed full-time (48.3 percent) far exceeds the national average of 43.5 percent. As a result, the share of part-time and unemployed residents in the DMA is low.

The following table shows the ten largest public and private employers in Virginia Beach and Hampton Roads.

Virginia Beach	Industry	# of Civilian Employees	Hampton Roads	Industry	Location	# of Employees	
Naval Air Station Oceana-Dam Neck	Government/Military	5,850	Huntington Ingalls Industries	Manufacturing	Newport News	20,000+	
Sentara Healthcare	Medical and Surgical Hospitals	5,200	Sentara Healthcare	Services	Norfolk	20,000+	
Joint Expeditionary Base Little Creek/Ft. Story	Government/Military	3,600	Riverside Health System	Services	Newport News	6,000-10,000	
GEICO General Insurance Company	Auto and Other Vehicle Insurance Carriers	2,700	Norfolk City Public Schools	Government/Military	Norfolk	6,000-10,000	
General Growth Properties (Lynnhaven Mall)	Retail Trade	2,600	Norfolk Naval Shipyard	Government/Military	Portsmouth	6,000-10,000	
Gold Key/PHR Hotels & Resorts	Developer, Owner and Operator of Hotels	2,365	Virginia Beach Public Schools	Government/Military	Virginia Beach	6,000-10,000	
STIHL Incorporated	Power Tools Manufacture	2,113	City of Virginia Beach	Government/Military	Virginia Beach	6,000-10,000	
Amerigroup (Anthem)	Corporation Insurance Carriers	1,850	Portsmouth Public Schools	Government/Military	Portsmouth	3,000-5,000	
Navy Exchange Service Command	Military and Government Exchange Retail	1,550	Chesapeake City Public Schools	Government/Military	Chesapeake	3,000-5,000	
Engility Corp.	Engineering Services	800	NASA Langley Research Center	Government/Military	Hampton	3,000-5,000	

Source: Virginia Beach Economic Development, Hampton Roads Economic Development Alliance

There is a strong military presence in the area, particularly in the broader Hampton Roads region, and many of the area's largest employers are military entities. Many of the other larger employers are public bodies such as school districts and city governments.

However, there are also many large private employers in the area, including Sentara Healthcare, the Riverside Health System, Gold Key/PHR Hotels & Resorts, STIHL, and others. Gold Key/PHR, STIHL, Anthem, Harmony Investments, Liberty Tax Service, and Clark Nexsen are all headquartered in Virginia Beach and employ 300 to nearly 2,400 people.

RESIDENT ACTIVITIES

In addition to basic demographic data, Nielsen Scarborough has been measuring media, retail, and lifestyle habits on a national and local level for more than 40 years. Each year, Nielsen surveys over 200,000 individuals in 129 US markets, maintaining a nationally representative sample and local market relevance. Scarborough insights provide information on the shopping patterns, media behaviors, demographics, and distinctive lifestyles of the American consumer at a local, regional, or national level across more than 2,000 categories and brands.

Nielsen leveraged its proprietary Scarborough market research database to provide insights into the demographic profile and size of the Norfolk DMA as well as concertgoers from the DMA.

Events and Places Visited

The following table shows the results of surveys of DMA residents related to events attended and places visited in the last 12 months, and as possible, comparisons to national indexes.







	% of Population	Index to National Average	Event/Activity/Facility	% of Population	Nation: Averag
Music/Concerts			Sports		
All concerts (combined)	41.0%	29.3%	Any professional sports event	31.4%	-9.0%
ny paid ticket music concert	15.7%	7.5%	Norfolk Tides baseball game	17.0%	-
lock concert	15.0%	9.5%	High school sports event	15.8%	-11.2
Other musical concert (jazz, blues, etc.)	12.3%	-	Virginia Beach Sportsplex event	5.4%	-
Country music concert	11.2%	14.3%	Norfolk Admirals hockey game	5.1%	-
&B/rap/hip-hop concert	10.0%	66.7%	Old Dominion University basketball game	4.2%	_
eterans United Home Loans Amphitheater Virginia Beach	9.5%	-	Old Dominion University football game	4.1%	_
Chrysler Hall event	9.0%	-	Other professional sports event	3.9%	_
lymphony concert, opera, etc.	7.5%	5.6%	NASCAR	3.7%	_
Portsmouth Pavilion event	4.7%	-	Washington Redskins football game	3.7%	_
			Washington Nationals baseball game	3.4%	_
Other Event/Facility			East Coast Surfing Championships	3.2%	
Talor Evollor dulity			Monster Jam (monster trucks)	3.0%	76.5
Iorfolk Scope event	10.9%		Norfolk State University sports event	3.0%	70.5
lampton Coliseum event	10.5%	-	Dover Downs (for horse races)	2.8%	_
lampton Collseum event	10.5%	-		2.8%	-
Other			Other college basketball game	2.7%	-
omer			Richmond International Raceway event		31.39
	45.00/	E4 (0/	WWE (pro wrestling)	2.1%	31.3
Any theme park	45.0%	54.6%	College of William & Mary sports event	1.8%	-
Busch Gardens (Williamsburg)	35.5%	-	Hampton University sports event	1.7%	-
000	24.3%	-8.3%	MEAC Basketball Tournament	1.6%	-
tate or national park	22.0%	=	Rock 'n' Roll Virginia Beach 1/2 Marathon	1.6%	-
Colonial Williamsburg	21.5%	-	University of Virginia sports event	1.4%	-
Vashington, D.C. museums	14.3%	=	Baltimore Ravens football game	1.3%	-
Vashington, D.C. monuments	13.7%	-			
Other nightclub	13.1%	-	Arts/Culture		
Vater Country USA	10.4%	-			
Ocean Breeze Water Park	9.3%	-	Arts & crafts fair or festival	16.4%	-
imes Square (in New York City)	7.4%	-5.1%	Live theater	15.3%	-19.9
lauticus	7.3%	-	Virginia Aquarium and Marine Science Center	14.4%	-
(ings Dominion	6.9%	-	Comedy club	10.7%	39.0
lealth/wellness/fitness expo	6.5%	25.0%	Art museum	10.3%	-26.4
ob fair/recruitment fair	6.4%	36.2%	Virginia Living Museum	8.7%	-
Other theme park	5.9%	-	Children's Museum of Virginia	8.1%	_
Great Wolf Lodge	5.3%	_	Other museum	7.7%	_
larbor cruise	4.6%	_	Dance or ballet performance	6.5%	1.69
10.00 G 0.00	4.070		Virginia Air & Space Center	6.2%	1.0.
			Ferguson Center for the Arts event	5.6%	-
			Circus	5.4%	35.0
			lce show	2.2%	4.89

In general, attending concerts is the second-most popular activity in the market (41 percent of residents), following only theme parks. The share of local residents who attended concerts exceeds the national average by nearly 30 percent, and individual genres of concert attendance are also

- o rock music 9.5 percent greater than the national average,
- o country music 14.3 percent greater,

overrepresented in the local population, such as:

- o R&B/rap/hip-hop 66.7 percent greater, and
- o Symphony and opera 5.6 percent greater.

The genres above are shown in the order of their popularity locally (i.e. rock music was attended by the largest share of residents, followed by country, R&B/rap/hip-hip, and symphony/opera). However, while R&B/rap/hip-hop shows were less attended than other genres, it is relatively much more popular locally compared to nationally than the other genres.

Source: Nielsen Scarborough 2017







In the Arts & Culture category, comedy clubs are also particularly popular locally (10.7 percent of residents, which exceeds the national index by 39 percent), as is the circus, while art museums are visited locally less than they are nationally.

Sporting events are generally attended less often by local residents than they are across the US, although the Virginia Beach area lacks a major professional sports franchise. However, residents have attended local minor-league games and have traveled to nearby markets for other sporting events. Professional wrestling is particularly popular locally (31 percent greater than the national average).

Attendee Demographics and Behaviors

The following table summarizes the demographics of concert attendees in the DMA, for all concerts as well as specific genres.

CONCERT ATTENDEE	DEMOGRAPHIC	CS				
	All (Combined)	Rock Concert	Country Concert	R&B/Rap/ Hip-Hop	Symphony, Opera, etc.	Other e.g. Jazz
Millennials (18-34)	36.2%	41.2%	40.8%	45.2%	31.4%	19.4%
	[110]	[125]	[124]	[138]	[96]	[59]
Wealthy (\$100k-\$250k)	27.9%	32.0%	27.7%	17.1%	35.9%	29.3%
	[126]	[144]	[125]	[77]	[162]	[132]
Educated (College Grad)	30.8%	31.7%	25.9%	24.5%	46.2%	37.6%
	[122]	[127]	[103]	[97]	[184]	[150]
Employed (Full-Time)	57.8%	70.0%	61.4%	57.1%	46.1%	50.9%
	[120]	[145]	[127]	[118]	[96]	[105]
Married	51.9%	52.9%	57.0%	31.9%	59.8%	53.3%
	[101]	[103]	[111]	[62]	[116]	[103]

Source: Nielsen Scarborough 2017

The table shows whether a particular demographic group is over- or underrepresented as a share of concert attendees compared to the general population in the DMA. For example, Millennials represent 36.2 percent of all concert attendees locally, which is ten percent more than their share of the population (shown by the index of 110). Overall, local concert attendees tend to be young, wealthy, educated, and employed, all of which are strengths of the local market.

While the following information does not directly impact potential demand for the planned facility, it could be useful for marketing purposes and/or for targeting tenants at The Wave. Nielsen Scarborough research shows the following activities and behaviors that are particularly over- or underrepresented for local concert attendees compared to the DMA population:

o 125 percent more likely to have used Amtrak and 61 percent more likely to have used an ondemand car service (such as Uber or Lyft) in the past week,







- o 93 percent of concert attendees ate at a quick-service restaurant in the last 30 days, led by Chick-fil-A (46 percent), McDonald's (40 percent), Wendy's (37 percent), and Taco Bell (30 percent).
 - Concert attendees are particularly overrepresented for having gone to Starbucks (42 percent more likely), Wingstop (40 percent), Qdoba (36 percent), Papa John's (28 percent), and Chanello's (26 percent).
- o 86 percent of concert attendees ate at a sit-down restaurant in the last 30 days, led by Applebee's, IHOP, Cracker Barrel, Olive Garden, Buffalo Wild Wings, Golden Corral, Outback Steakhouse, and Ruby Tuesday (10 to 18 percent of attendees).
 - Concert attendees are particularly overrepresented for having gone to Hooters (67 percent more likely), Buffalo Wild Wings (50 percent), and T.G.I. Friday's (41 percent).
- The most popular type of restaurant for local concert attendees is Chinese (45 percent), followed by Mexican (38 percent), pizza (35 percent), Italian (22 percent), and seafood (22 percent).
 - Concert attendees are particularly overindexed for sports bars (52 percent more likely), coffeehouses (46 percent), Mexican restaurants (31 percent), and Asian, Italian, steak, and "other upscale restaurants" (23 to 27 percent).

TOURISM AND AREA ATTRACTIONS

Due to its climate, oceanfront, accessibility from large population centers, and other characteristics, Virginia Beach is a major destination for tourism. While visitation occurs year-round, tourism peaks in the summer, followed by the spring and fall, and then winter. Hotel demand and rates are consistent with this seasonality. The following information summarizes data regarding the local tourism industry.

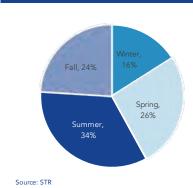
- o According to Longwoods International, the total number of "person-trips" to Virginia Beach in 2017 was 19 million (including 10.1 million overnight trips and 8.9 million day trips), which represented a seven-percent increase over 2016. Since 2013, the number of both overnight and day trips to Virginia Beach have increased annually.
- o According to Longwoods, nearly half of overnight and day trips are considered "marketable" trips, which include trips influenced by marketing efforts rather than visiting friends and relatives. Forty to 50 percent of travelers are visiting friends and relatives, and less than ten percent are business trips.
- o The graph and chart below show the seasonality of tourism, first by room nights per season, followed by the number of visitors per month.







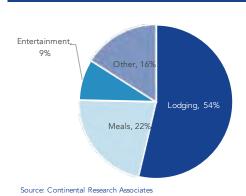






- o Hotel demand by month is consistent with the chart to the right above; hotel occupancy and rates peak in July and August, followed by spring and fall.
- o According to the Virginia Tourism Corporation, in the broader Coastal Virginia-Hampton Roads region, Virginia Beach is the most popular destination (38 percent of visitors), followed by Williamsburg (36 percent), Norfolk (24 percent), and Richmond and Newport News (17 percent each).
 - The most popular activities of these visitors is shopping (28 percent), visiting relatives (27 percent), the beach (23 percent), and historic sites (19 percent).
- o According to Continental Research Associates, the average length of stay peaks in the summer (4.7 nights), and is between 3.7 and 3.9 nights in spring, fall, and winter.
- o The following chart shows tourists' spending by type in Virginia Beach.











Attractions

Local attractions include the following:

- o The Virginia Beach Boardwalk the three-mile Boardwalk, from 2nd Street to 40th Street, includes a bike path, multiple stages, and the King Neptune statue. Along the Boardwalk are multiple restaurants, bars, and shops. Event programming that occurs at the Boardwalk is described in more detail in the following section.
- o Surfing Virginia Beach is strongly associated with surfing and is the host of the East Coast Surfing Championships. Surfing opportunities are available throughout the area.
- o The Virginia Aquarium & Marine Science Center includes more than 800,000 gallons of exhibits and the National Geographic 3D Theater.
- o Historic sites there are 18 sites on the National Register of Historic Places in Virginia Beach, including the Adam Thoroughgood House, the Francis Land House, and many others.



Section 3
Local and
Regional
Competitive
Analysis







This section includes an overview of the planned development, the music and entertainment industry, the local and regional competitive environment for facilities, and he results of meetings and interviews with various stakeholders.

THE WAVE DEVELOPMENT AND EVENT CENTER

The planned Event Center, which is the subject of this study, would be part of The Wave, a mixed-use development near the oceanfront (generally between 18th and 20th Streets and Baltic Avenue and Pacific Avenue) that would also include multifamily residential, retail and restaurants, a cinema, office space, parking, and a surf park. The Wave site is on the former site of the Virginia Beach Civic Center (also known as The Dome), a well-known concert venue that opened in 1958 and was demolished in 1994.

The Event Center, as preliminarily planned, would have the following characteristics:

- o 38,000 square feet,
- The ability to host both indoor and outdoor events, with a reversible stage that faces towards an indoor club and an outdoor amphitheater. The capacity for an indoor event could range from approximately 2,400 (seated) to 3,200 (general admission), and the outdoor capacity could be approximately 5,000.
- o In-house sound and light equipment would be available to events.
- o The multipurpose facility would be able to host a wide range of events, including concerts and other entertainment, comedy, speakers, social events, flat-floor events, sporting events, and others.
- o The venue would also have other, smaller indoor and outdoor spaces for events, such as a VIP/hospitality lounge and outdoor terraces.
- The facility will be operated by The Oak View Group, a relatively new entity in the sports and entertainment industry but led by executives with decades of industry experience, including locally.

Pharrell Williams, a Virginia Beach native and singer, songwriter, and producer who has won ten Grammy Awards and been nominated for two Academy Awards, is a partner in the Event Center. It is expected that Williams will regularly perform at the venue and create a branded festival, which will increase usage of the Event Center.







THE TOURING EVENTS INDUSTRY

Touring events, such as concerts, comedians, and other entertainment events, provide a significant amount of content for venues of all sizes. This section focuses primarily on concerts and their characteristics, but also addresses other types of touring events.

Concerts

Touring concerts typically provide reliable booking opportunities for venues such as theaters, clubs, arenas, stadiums, and amphitheaters. Acts typically perform within a specific venue capacity range, based on their ability to sell an expected number of tickets in a given market, although the number of tickets sold and at various prices will change from market to market. However, based on the typical market demand for an act and the desire to perform in the same type and size of venue for the purposes of show production and planning, any tour will generally route within a similar type and size of facility.



These venues have benefitted from recent technological changes within the music industry that have significantly affected how people consume music. Specifically, the introduction of iTunes in 2003 and more recently, streaming music services, have greatly affected recording musicians. In general, spending on physical

album sales (and more recently, digital sales) has decreased; this used to represent the bulk of a professional touring artist's income. As the consumption of recorded music has shifted from CDs to digital sales to streaming, each technology has been less profitable to artists. With this revenue stream disappearing, many artists are touring more than ever, to the benefit of venues. While music consumption overall is growing, it is shifting from physical and digital song/album sales to streaming as well as live performances. According to one analysis of the top tours, the annual number of shows has increased from a low of approximately 6,000 in 2000 to 8,000 to 10,000 per year since then.

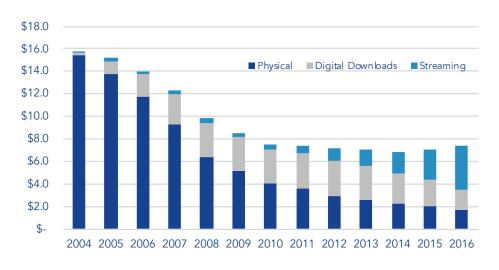
As an example, Billboard estimated that Beyoncé, 2016's top earner among musicians, generated nearly \$55 million from ticket sales and a relatively modest \$4.3 million from music sales. (Others on its list of the top 50 earners also generated significantly more from performing than from music sales, aside from those that did not tour in 2016.) From 2016 to 2017, the sale of physical and digital music – both full albums and individual tracks – continued its decline, with streaming services gaining in popularity. Again, to replace the formerly lucrative source of revenue from CD sales, artists are touring more and more. (According to Billboard, from 1990 through 2000, the highest-selling album in the U.S. generally sold between five and ten million copies; from 2005 on, it exceeded five million only once.)





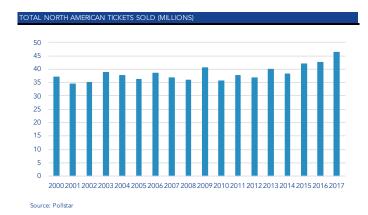


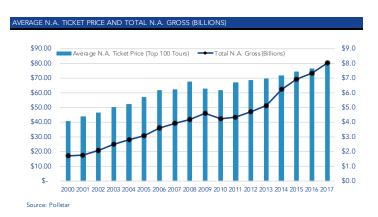
U.S. MUSIC INDUSTRY RETAIL REVENUE (ADJUSTED FOR INFLATION)



Source: RIAA

In 2017, according to Pollstar, new records continued to be set in North America for the number of tickets sold (more than 46 million), the average ticket price (more than \$78 for the top 100 tours), and total gross sales (\$8 billion). As the following charts show, these figures have generally been growing over recent years, and the increase in ticket prices has not stopped demand for tickets.





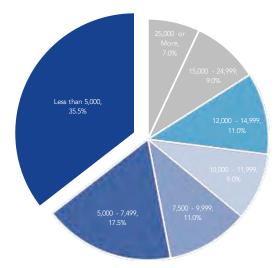
As mentioned above, touring acts generally perform in similar facilities throughout an individual tour, and not all acts are available to a given facility (nor can all markets support the ticket prices and number of tickets that need to be sold in order to support a show). The chart below shows the distribution of average tour attendance for Pollstar's 200 top-grossing tours from 2016.







2016'S TOP 200 GROSSING TOURS BY AVERAGE ATTENDANCE



Source: Pollstar

More than one-third of the top 200 tours achieved an average of less than 5,000 per show; these were typically held in theaters, clubs, and small arenas. Another 18 percent averaged between 5,000 and 7,499 per show; as a result, more than half of the tours that are among the 200 highest-grossing tours did not sell more than 7,500 tickets per show. In addition, the tours that are outside of the top 200 also provide programming opportunities to smaller venues.

Specific examples of acts that sold no more than 5,000 tickets per show, on average, include Willie Nelson, Chris Young, John Fogerty, the Avett Brothers, and ZZ Top. Acts in the 5,000-to-7,500 range included Alabama Shakes, Chris Stapleton, Ellie Goulding, and Paul Simon.

Other Touring Entertainment Events

In addition to concerts, there is a wide range of other touring events that are available to venues, although, similar to concerts, the specific events often change from year to year based on touring decisions. Because of the varying nature of these events, its overall industry is not necessarily quantifiable in the same way as concerts; however, we have researched available information in order to provide a better understanding of the types and scale of events, and the facilities that they perform in.

o Family shows – this subcategory alone is quite diverse and can include a large share of non-concert touring events. Family shows are typically geared towards children of varying ages and can include circuses, a rotating collection of Disney-themed events (such as Disney on Ice, Frozen, and others), Sesame Street Live, and many others. Cirque du Soleil also tours with multiple shows, and although many of them are popular enough for NBA- and NHL-sized arenas, others can perform in smaller arenas and theaters. Many family shows were among







the world's top tours in 2017, including Disney On Ice (third, behind U2 and Guns N' Roses, with nearly three million tickets sold), eight different Cirque du Soleil shows, Paw Patrol Live!, Marvel Universe Live!, and Harry Potter in Concert. However, many of these events require a typical arena floor configuration rather than a stage.

Unlike concerts and many other events, family shows typically hold multiple performances over consecutive days (up to as many as eight or more performances), and their touring season coincides with that of most other indoor events (fall to spring). Ticket prices are typically much lower than for concerts, and attendance for an individual performance is typically less than 3,000.

- Comedy comedy shows are particularly popular now, and many comedians are among the top-grossing entertainment events. The growing popularity of comedy has created new content for theaters, clubs, and arenas. Today, comedians such as Jerry Seinfeld, Amy Schumer, and Jim Gaffigan typically perform in larger theaters as well as arenas and averaged ticket sales of approximately 3,500 to 7,000 in 2016.
- o Sports/competition events other touring events, but with a sports or competitive component, include the Harlem Globetrotters, WWE, motorsports and Monster truck events, Professional Bull Riders, rodeos, and others. In addition, many of these events have multiple subtours that are geared towards different audiences and facility sizes. However, because of the nature of these events, they typically require an arena with a basketball and/or hockey-sized event floor, rather than a theater or club configuration with a stage. However, sports such as boxing and MMA can be accommodated within a club or theater.
- Others other touring events can include speakers, religious events, and other types of entertainment. Similar to comedians, speakers, entertainers, journalists, authors, and intellectuals such as Theresa Caputo, Neil deGrasse Tyson, Anderson Cooper, and others have provided a new content source for venues that did not previously exist at a significant level. To capitalize on this trend (as well as the popularity of comedy), one major booking agency/management company (Madison House) recently launched a speaker and comedy division that will provide additional content to venues.

Event Promoters

Another major change that has affected the live entertainment industry has been the consolidation of promoters. Two companies – Live Nation and AEG – are by far the largest promoters in the US and worldwide and control a great deal of talent. Live Nation is significantly larger than AEG, and has grown in part by acquisitions of other promoters, including House of Blues, which was the industry's second-largest promoter when it was acquired by Live Nation in 2005. Also, in 2010, Live Nation merged with Ticketmaster, the industry's largest ticketing provider.





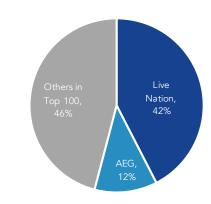


In addition to serving as a concert and festival promoter and ticketing service, Live Nation also owns and operates venues and sells sponsorships. As of late 2017, Live Nation promoted nearly 30,000 events for more than 4,000 artists and owned, operated, or had an equity interest in 222 venues worldwide (including Virginia Beach's Veterans United Home Loans Amphitheater).

Through this consolidation and promoter ownership of venues, more venues now have exclusive promoter relationships, whereby a promoter (and potentially facility owner) such as Live Nation will not work with other promoters at their facility. However, in most cases, a more "open" structure is in place, and any promoter can potentially work with a venue; this is the case at Veterans United Home Loans Amphitheater, and generally allows for a larger universe of events to perform at a venue. For example, if AEG controls a tour and is looking for a large amphitheater in the Virginia Beach market, it could book the VUHLA rather than be shut out, assuming the arrangement makes business sense for both AEG and Live Nation.

The following chart shows the share of the nearly 124 million tickets sold worldwide in 2017 by Live Nation, AEG, and the next 98 promoters combined.

WORLDWIDE TICKET SALES BY PROMOTER, 2017



Source: Pollstar

Live Nation sold 42 percent of worldwide tickets (52.5 million), followed by AEG with 12 percent (14.4 million). Live Nation's market share does not include promoters that it has acquired a major share of, or has exclusive deals with, such as:

- o OCESA/CIE the third-largest promoter in the world, with more than four million tickets sold, dominates Mexico and South America, and has an exclusive distribution deal with Live Nation.
- o C3 Presents in 2014, Live Nation purchased a controlling share of C3 Presents, which was the world's 17th-largest promoter in 2017 (1.1 million tickets sold). C3 Presents is the promoter of many leading festivals, including Lollapaloozas in the US and South America, the Austin City Limits Music Festival, and many others.







o Frank Productions – earlier this year, Live Nation acquired a majority share of Frank Productions, one of the country's largest independent promoters (and 23rd worldwide, with 673,000 tickets sold in 2017).

LOCAL AND REGIONAL FACILITIES

This section identifies relevant local indoor and outdoor facilities, and their characteristics and potential competitiveness with the Event Center.

	Location	Concert Capacity	Driving Distance from The Dome (Miles)	Year Opened	Owner	Operator	Potential Competition with Event Center
ndoor Theaters and Clubs							
The Sandler Center	Virginia Beach	1,308	10	2007	City of Virginia Beach	Spectra	LOW
The NorVa	Nofolk	1,450	18	2000 (reopened)	AEG	AEG	MEDIUM
Chrysler Hall	Nofolk	2,500	18	1972	City of Norfolk	City of Norfolk	MEDIUM
Ferguson Center for the Arts	Newport News	1,725	45	2005	Christopher Newport University	CNU	LOW
Outdoor Amphitheaters							
Veterans United Home Loans Amphitheater	Virginia Beach	20,000	12	1996	City of Virginia Beach	Live Nation	LOW
Union Bank & Trust Pavilion	Portsmouth	6,500	20	2001	City of Portsmouth	IMGoing	MEDIUM
ndoor Arenas							
Ted Constant Convocation Center	Nofolk	9,100	21	2002	Old Dominion Univ.	Spectra	NONE
Norfolk Scope	Nofolk	13,800	18	1971	City of Norfolk	City of Norfolk	NONE
Hampton Coliseum	Hampton	13,800	34	1970	City of Hampton	City of Hampton	NONE
Virginia Beach Sports Center	Virginia Beach	n/a	0.5	TBD	City of Virginia Beach	City of Virginia Beach	NONE
Free Venues							
Virginia Beach Boardwalk	Virginia Beach	Various	0.2	n/a	City of Virginia Beach	IMGoing	LOW
Town Point Park	Nofolk	45,000	18	2009	City of Norfolk	Norfolk Festevents	NONE
Waterside District	Nofolk	3,000	18	2017	The Cordish Companies	The Cordish Companies	NONE

Indoor Theaters and Clubs

Source: Individual facilities, Stone Planning

The Sandler Center for the Performing Arts (Virginia Beach)

The Sandler Center opened in 2007 as a replacement for the 1,000-seat Pavilion Theatre, as a need for better and larger facilities in Virginia Beach was identified. The facility is owned by the City of Virginia Beach and operated by Spectra and NS2, who guarantee a minimum of 37 touring events per year to the facility (through promoting/co-promoting or as rentals), which provide greater exposure and visibility to the facility, beyond its tenant events.









The theater's performance hall has a capacity of 1,300 and an outdoor performance plaza has 18,000 square feet. A number of smaller venues are also available within the facility: the lobby (capacities of 250 seated/400 standing), the Miller Studio Theatre (125/200), the Wood Room (50/60), and two classrooms (50/60 each).

The theater has nine resident companies (which have priority on event dates over other events), including the Virginia Beach Chorale, Virginia Musical Theatre, and the Virginia Symphony Orchestra, but also hosts other touring entertainment events such as concerts, family shows, and comedians. It also hosts the "Ynot Wednesdays?" free summer concert series on the outdoor plaza and the Winter Concert Series in the Miller Studio Theatre.

Daily rental rates for the performance hall are \$2,750 (performance days) and \$1,750 (non-performance days) for commercial groups and \$2,000 and \$1,250 for non-profits. The outdoor plaza is \$1,500 for commercial groups and \$12,500 for non-profits. Smaller facilities range from \$300 to \$1,200 per day (commercial) and \$250 to \$850 per day (non-profit). The Sandler Center also charges a \$1-per ticket facility surcharge for tickets less than \$21, and \$2 for tickets priced above \$21.

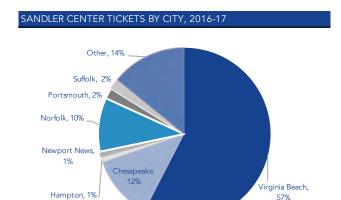
The following information summarizes operational characteristics of the Sandler Center's 2016-17 fiscal year:

- o 480 total events and 195,747 attendees, including:
 - o Resident companies: 169 events and 47,490 attendees,
 - o Great Performance Series: 25 selected commercial events (such as Amos Lee, Celtic Thunder, Peter Frampton, and Vince Gill) and approximately 55,000 attendees. Next year, the Series is expected to increase to 40 to 45 shows,
 - o Ynot Wednesdays?: 14 weekly events and approximately 43,000 total attendees, and
 - o Winter Concert Series: approximately 2,000 attendees over eight weeks of performances.
- o \$1.5 million in gross ticket revenue, \$107,000 in facility surcharge revenue, and \$141,000 in admission taxes,
- o The chart below shows ticket sales by city:









Source: Pollstar

According to Pollstar, the average attendance for all ticketed entertainment events in the last three years was 969, with an average ticket price of approximately \$51.

Sandler Center Planning Studies

Prior to the construction of the Sandler Center, a number of studies that identified the need for the facility, and others, were commissioned. These studies were completed by late 2002; however, many of their conclusions and recommendations are still relevant, as described below.

- o The local and regional markets were considered to be strong, with a young, affluent, and well-educated population that has a high propensity to participate in events and is concentrated in Virginia Beach.
- o A 1,000- to 1,200-seat multipurpose theatre (which became the Sandler Center) was recommended as a replacement of the Pavilion Theatre, as it was inadequate and there was no other theatre in Virginia Beach between 750 and 2,000 seats, or in the region between 900 and 1,500 seats.
- o In addition to the facility described above, a "300-to-500-seat multipurpose community venue" and a "2,500-to-3,500-seat commercial venue at the beachfront in partnership with a commercial presenter" were also recommended. The latter venue still does not exist in the market and is the type of venue studied in this report.







The NorVa (Norfolk)

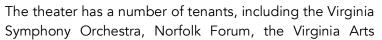
The NorVa originally opened in 1917 as a 2,000-seat Vaudeville theater and later served as a movie theater. It reopened in 2000 as a 1,450-seat club and is now owned by AEG. It primarily hosts touring concerts and has reported an average of approximately 128 per year in the last three years. The average attendance of these shows was 1,110, with an average ticket price of \$28. A wide range of music genres are represented, through acts such as Tyler, the Creator, the Pixies, Cake, Charli XCX, KRS-ONE, Twenty One Pilots, Band of Horses, and Run the Jewels.



The NorVa is owned and exclusively promoted by AEG, but its rental rate is known to be approximately \$6,500.

Chrysler Hall (Norfolk)

Chrysler Hall is Norfolk's primary performing arts venue and is located in downtown Norfolk. It is owned by the City and operated by its Department of Cultural Facilities, Arts and Entertainment as part of its Seven Venues (along with the Scope Arena, the Attucks Theatre, the Wells Theatre, Harrison Opera House, Harbor Park, and Open Air Events).





Festival, the Virginia Ballet, and the Generic Theatre, but also hosts concerts, family shows, comedians, and other entertainment. According to the facility, total usage is approximately 150 events and 150,000 attendees.

The theater's capacity is 2,488 for ticketed performances and its published rental rate is \$12,500, including all front-of-house expenses. Its Dress Circle has capacities of 250 (seated) and 450 (standing) for private events such as meetings and parties, and the Stage Left Lounge has a 50-person capacity for smaller events.

In the last three years, the facility has reported approximately 50 non-tenant entertainment events per year, with an average attendance of approximately 1,400 and an average ticket price of \$52. These events have included popular concerts (Robert Plant, Gladys Knight), family shows (Alvin and the Chipmunks: Live, Disney Live), Broadway shows and musicals (Ragtime, The Nutcracker), comedians (Bill Burr, Hannibal Buress), and others.







The City of Norfolk is planning approixmately \$40 million or more of improvements to the facility, including approximately 100 additional seats, expanded restrooms and lobby areas, and improved systems and F&B areas.

Ferguson Center for the Arts (Newport News)

The Ferguson Center is a theater and concert hall that is located on Christopher Newport University's campus. The facility includes two concert halls and smaller event spaces, and opened in 2005. The primary venue in the Center is Diamonstein Concert Hall, with 1,725 seats; others include the 453-seat Peebles Theater and the 200-seat Studio Theater, as well as rehearsal halls, a dance studio, arts studioes, an art gallery, classrooms, and others.



The facilities present a wide range of performances, ranging from Broadway shows to popular music and other entertainment, in addition to performances by the Virginia Symphony Orchestra, the CNU Department of Music and Department of Theater and Dance.

In 2017, the facility reported 12 ticketed entertainment events, including Mamma Mia, Ben Folds, Manhattan Transfer, and Stephen Stills and Judy Collins. Average attendance in the last three years has been 1,460, with an average ticket price of \$64.

The facility charges a convenience fee for online and phone sales that ranges from \$3 to \$25, depending on the ticket price, and a \$5 per order fee from its box office.

Outdoor Amphitheaters

Veterans United Home Loans Amphitheater (Virginia Beach)

This amphitheater is owned by the City of Virginia Beach and operated by Live Nation, and opened in 1996. It is one of the larger amphitheaters in the US, with a capacity of 20,000 (7,500 covered pavilion seats and 12,500 general-admission lawn seats), and therefore hosts some of the largest touring acts such as Kenny Chesney, the Dave Matthews Band, and Bruce Springsteen & the E Street Band. However, some smaller shows only sell the covered pavilion seats. The facility also has five dedicated parking lots, and parking fees are typically added to the ticket price.

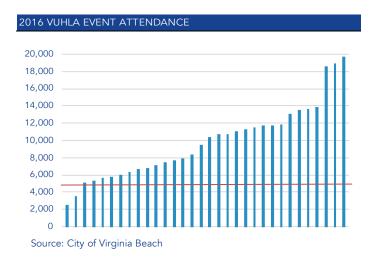








The facility has hosted an average of 27 shows per year from 1999 through 2016, with an average attendance of slightly more than 10,000. In 2016, 32 shows had an average paid attendance of 9,823; paid attendance for each show is shown below.



Paid attendance ranged from 2,570 (Fifth Harmony) to 19,687 (Jimmy Buffett). In addition to Fifth Harmony, only two shows' attendance were below or near the expected 5,000-person capacity of the Event Center's oudoor capacity – the Goo Goo Dolls (3,487 paid) and Gwen Stefani (5,066 paid). However, the actual turnstile attenance of the Gwen Stefani show was 6,611. Three other shows had paid attendance of 5,000 to 6,000: Diplo (5,285), G-Eazy (5,718), and Slipknot (5,783).

According to facility representatives, its shows do attract tourists but specific data is not available.

Union Bank & Trust Pavilion (Portsmouth)

The Union Bank & Trust Pavilion is located across the Elizabeth River from downtown Portsmouth and opened in 2001 (through 2016, it was known as the nTelos Pavilion). The facility has a capacity of 6,500, with 3,500 covered and reserved seats, and 3,000 uncovered, general-admission lawn seats. The facility is owned by the City of Portsmouth and operated by IMGoing.



In the last three years, the facility has hosted an average of

14 concerts per season. In 2018 (as of mid-April), 17 shows are scheduled. According to Pollstar, 2015-17 concerts had an average attendance of approximately 4,300 and an average ticket price of \$39.







The facility offers two types of premium seats: season seats and box seats. Season seats include parking, access to the VIP Club (full bar, pre-show performances, food, restrooms, and beer and wine tastings), a private entrance, and advance ticket access. Box seats are sold in groups of four, six, and eight, and include in-box F&B service, parking, VIP Club access, a private entrance, and advance ticket access.

The facility's published rental rate is \$5,000 or 10 percent of ticket sales, plus facility expenses. The facility also charges a \$1 facility fee.

According to the City of Portsmouth, the facility has two full-time equivalent staff positions and total operating expenses in 2016 were approximately \$306,000. This included approximately \$60,000 in salaries and benefits, \$26,000 in repairs and maintenance, and \$39,000 in utilities (electricity, water and sewer, and gas). This does not include IMGoing's expenses.

This spring, structural problems with the facility's roof caused its temporary closing and the relocation of multiple events to other area venues. The facility is expected to reopen this summer.

Indoor Arenas

Ted Constant Convocation Center (Norfolk)

The Constant Convocation Center is on the campus of Old Dominion University and is owned by ODU and operated by Spectra. The facility's primary user is ODU athletics, but it also hosts a wide range of other sporting events, concerts, other entertainment, and non-athletic university events. Its concert capacity is 10,000, which is much larger than the Event Center's planned capacity.



In a recent year, the arena hosted approximately 230 events, including 40 ODU athletic events. Other events included:

- 17 concerts with an average attendance of approximately 3,900,
- o 104 meetings, trade shows, and other similar events with an average attendance of approximately 270,
- o 12 non-ODU sporting events with an average attendance of approximately 1,600,
- o Eight family shows with an average attendance of approximately 2,400,
- o Ten other entertainment events with an average attendance of approximately 850, and
- o Four religious events with an average attendance of approximately 475.







While the arena hosted a significant number of concerts, its concerts are configured for arenas rather than theaters or clubs, and on average are larger than the maximum capacity of the planned Event Center. In addition, these concerts are generally held from fall through spring and therefore would not compete with an outdoor amphitheater.

Norfolk Scope (Norfolk)

The Norfolk Scope is a City of Norfolk-owned and -operated arena (which is part of SevenVenues) that opened in 1971. Its current tenant is the Norfolk Admirals of the ECHL and its concert capacity is 13,000, which is also much larger than the Event Center's planned capacity. However, the Scope's Prism Theatre configuration has a 4,000-person capacity. The Scope also has exhibit halls that have a maximum capacity of 3,850 seated attendees, and four smaller meeting rooms.



The arena's published rental rate is \$28,500, and \$20,000 for the Prism Theatre.

In a recent year, the arena hosted approximately 110 events and 250,000 attendees, including the following:

- o 60 sporting events (primarily hockey games) with an average attendance of approximately 2,300,
- o 11 concerts with an average attendance of approximately 2,100,
- o Ten family shows with an average attendance of approximately 3,300,
- o Nine other entertainment events with an average attendance of approximately 230, and
- o 14 religious events with an average attendance of approximately 3,200.

In the last three years, the Scope's average ticket price for entertainment events has been approximately \$31.

In conjunction with potential renovation plans for Chrysler Hall, the city is also considering improvements to the Scope that could include adding 4,000 seats and six to 12 luxury suites.

While the Scope's concerts are generally smaller than the Constant Convocation Center's, the facility would also be minimially competitive with the Event Center due to factors such as seasonality and physical requirements.

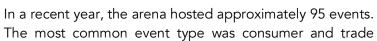






Hampton Coliseum (Hampton)

The Hampton Coliseum is a City of Hampton-owned and operated arena that opened in 1970. In the past, it had many minor-league sports tenants but current does not have one. The arena has a maximum concert capacity of 13,800, which makes it the largest indoor arena in the immediate area.





shows (23), primarily due to the exihibit halls. Other events included 22 family shows, 17 sporting events, 11 religious events, and ten concerts. In recent years, the arena's average attendance for music and entertainment events has been approximately 6,100, with an average ticket price of \$57. Similar to the market's other arenas, the Coliseum would not be competitive to the Events Center for entertainment acts.

Published daily rental fees are \$5,000 or 10 percent of gross ticket revenues for the arena and \$3,000 for conventions. The City of Hampton charges a ten-percent admissions tax on ticket sales, and the facility has a \$4.50 facility fee that is added to the ticket price. For non-ticketed events, an \$8-per car parking fee is charged.

Virginia Beach Sports Center (Virginia Beach)

The planned Virginia Beach Sports Center is not an arena per se like the Constant Convocation Center, Scope, and Coliseum, as these facilities all host major, ticketed sports and touring entertainment events. The Sports Center would be an indoor sports and recreational facility focused primarily on hosting youth and other amateur tournaments that would generate economic impacts to the city from tournaments, as well as provide local residents with fitness and recreational facilities.

As planned, the facility would be adjacent to the Virginia Beach Convention Center and feature the following elements:

- o 130,000 to 150,000 square feet,
- Multipurpose sports courts that can be used for basketball and volleyall (12 high school basketball courts or six collegiate courts, or 24 volleyball courts), as well as other indoor court sports,
- Seating for approximately 3,000 spectators, including 1,500 to 2,000 at a "championship" court,
- o Support space for concessions and catering, offices, team and officials' areas, storage, and others.







In order to support the primary orientation of tournaments, the facility is expected to prioritize all weekend usage for tournaments outside of nine months for scheduling purposes. This facility is not expected to be competitive with the Events Center, and could benefit it from tournaments' needs for an offsite venue for entertainment, awards banquets, opening and closing ceremonies, and other uses.

Free Venues and Programming

Virginia Beach Boardwalk (Virginia Beach)

The three-mile boardwalk in Virginia Beach (which is three blocks east of the Dome site) stretches from 2nd Street to 40th Street between the beach and hotels, restaurants, shops, bars, and other vendors. During the summer, free entertainment is offered nightly at four oceanfront stages (at 7th, 17th, 24th, and 31st Streets), and other free and paid events occur on the beach. The boardwalk and beach have both permanent and temporary stages for events.



The city's boardwalk and beach events are produced by IMGoing, and include concerts and music festivals, food festivals, Monster truck events, air shows, farmers markets, and others. Major events include the Neptune Festival and its Boardwalk Weekend, the Patriotic Festival (concerts, expos, and vendors), and the weeklong East Coast Surfing Championships.

The following map indentifies the events held at the Boardwalk and their location.









Town Point Park (Norfolk)

Town Point Park is an eight-acre waterfront park on the Elizabeth River that is located next to the Nauticus science center and museum (or the National Maritime Center) and the USS Wisconsin, and includes the Armed Forces Memorial. The park opened as it currently exists in 2009, and hosts free and ticketed outdoor concerts, festivals, and other special events. The park is programmed by the non-profit Norfolk Festevents on behalf of the city, and can accommodate as many as 45,000 people.



In 2018, from early May through early December, a total of 14 events are scheduled, including wine and beer festivals, food festivals, a Latin music festival, a 4th of July picnic, a Virginia Symphony Orchestra performance, a jazz festival, a boat show, a Christmas market, and others.







Waterside District (Norfolk)

The Waterside District is a market in downtown Norfolk, on the Elizabeth River. The original Waterside opened in 1983 but reopened in May 2017 after redevelopment by The Cordish Companies. The entertainment and dining district has a number of restaurants, bars, coffeeshops, and others. It also hosts free and paid events, including concerts, movies, fitness classes, and others. Its 2017 grand opening featured a free Weezer concert.



STAKEHOLDER FEEDBACK

The Local Market

o The market is considered to function as two distinct markets, separated by the James River, with Newport News and Hampton to the north and Virginia Beach and Norfolk to the south.

Local Facilities and Events

- o Since the Boathouse was destroyed by Hurricane Isabel in 2003, the market's club shows have moved to the NorVa.
- o The Union Bank & Trust Pavilion is a very good facility but its location is challenged, and its shows do not perform quite as well as they do in comparable markets. It is thought that the majority of tickets sold for its events are to Virginia Beach residents.
- o Due to its nine resident companies, the Sandler Center has very few available dates for commercial/touring events.
- o Because of all of the free outdoor events, it is difficult to sell tickets for indoor events in the summer.
- o It is thought that an event cannot play in the market more than once within 18 months.
- o Smaller, pavilion-only events held at the Veterans United Home Loans Amphitheater are there because there is no good alternative in the market.
- o The free concert series at the 31st Street boardwalk stage does not allow beer sales on the lawn, has no backstage amenities, and is difficult to load.

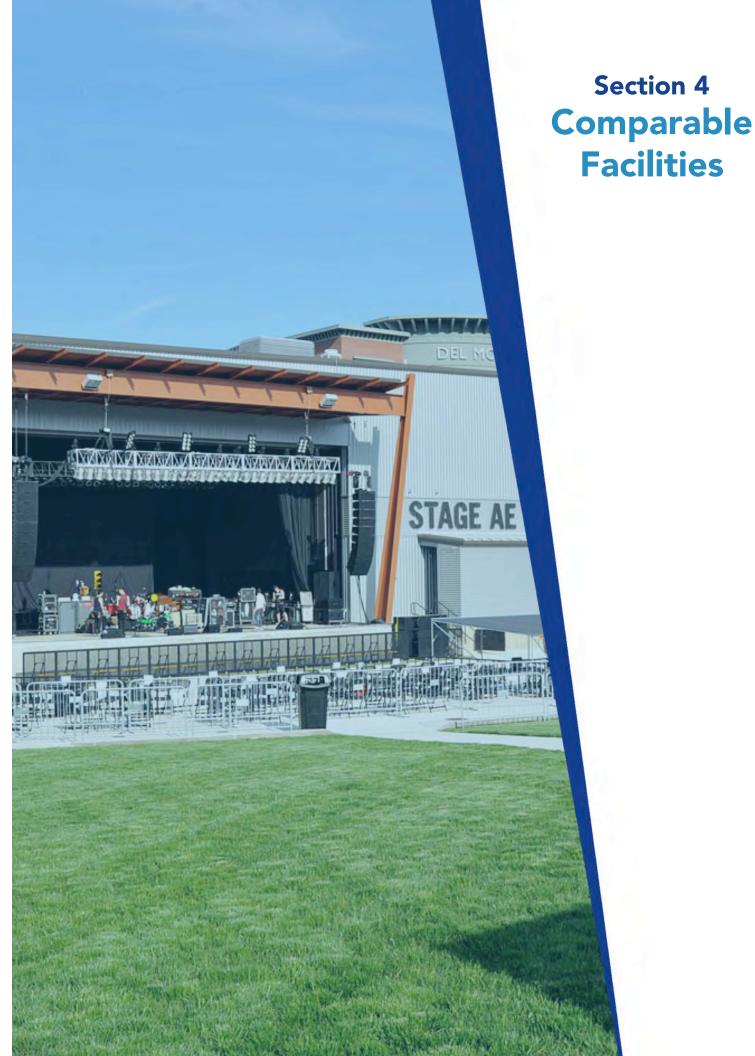






The Event Center

- o The facility is expected to compete primarily with The NorVa (indoor) and The Union Bank & Trust Pavilion (outdoor) for ticketed concerts. Secondary competition for indoor events would be with Chrysler Hall and the Ferguson Center.
- o It is thought that ticket sales for the Union Bank & Trust Pavilion are generally closer to 2,000, and these events could potentially be held indoors at the Event Center (particularly at the beginning and end of the outdoor season).
- o An advantage of the indoor venue over Chrysler Hall, the Ferguson Center, and others will be its flexibility for various configurations with its lack of permanent seating.
- o Free outdoor programming at the Event Center is not expected to detract from similar events currently being held at the beach; additional events could be added at the Event Center.
- o Outdoor shows could potentially be held from mid-April through early November in Virginia Beach.
- o There is a definite need for an additional indoor club in the market, with a capacity that is larger than Chrysler Hall but smaller than the Constant Center.









This section describes the characteristics of a set of venues that are similar to the planned Event Center. All three facilities identified have both indoor and outdoor configurations and are multipurpose venues that can host concerts, sports, social and community events, and other ticketed and free events.

There are not many true indoor/outdoor venues across the US that are similar to the planned Event Center, although some large amphitheaters can host indoor events in smaller configurations. However, the success of the existing indoor/outdoor venues is leading to the planning of additional facilities like them, particularly in markets that cannot necessarily support year-round events outdoors.

In addition to the three facilities described in more detail below, we also note that the development of (primarily indoor-based) multipurpose music/entertainment venues within larger mixed-use districts in urban areas is becoming more popular. While this has been common in gaming facilities, projects led by developers such as Cordish have also included performance venues within larger districts, in order to attract visitors for the broader development. Newer and planned projects in other markets further demonstrate the concept, including:

- o The Coca-Cola Roxy, Metro Atlanta opened in 2017 as part of The Battery Atlanta, a 1.5 million-square foot development next to the Atlanta Braves' new SunTrust Park in Cumberland that includes approximately 20 restaurants, 600 multifamily residential units, a hotel, an office tower, and other commercial development.
 - The Live Nation venue has 53,000 square feet and a capacity of 3,600. It can accommodate general admission, theater-style, and permanent seating for concerts, meetings, and private events. In the approximately 12 months since its opening, it has hosted more than 40 ticketed entertainment events with average ticket sales of 2,100.
- o Mission Ballroom, Denver recently announced by AEG and developer Westfield, the 60,000-square foot venue is expected to open in 2019 within the 14-acre North Wynkoop mixed-use district in Denver. The facility will have a maximum capacity of approximately 4,000 but a moveable stage will allow for various capacities down to 2,200; it will also offer sound and lighting, multiple bars, and two VIP/reserved areas.
- o **Lincoln Yards, Chicago** in downtown Chicago's adjoining Lincoln Park and Bucktown neighborhoods, developer Sterling Bay is redeveloping a former industrial site with more than 70 acres of office, residential, hotel, retail, and entertainment space, and has partnered with Live Nation on three to five venues, including a 20,000-seat stadium, a 6,000- to 8,000-seat venue, and others.







EXPRESS LIVE!

Columbus, Ohio

EXPRESS LIVE! was the country's first combination indoor-outdoor concert venue, and is located in downtown Columbus' Arena District. The District also includes the NHL Columbus Blue Jackets' 20,000-seat Nationwide Arena, the Columbus Clippers' (AAA) 10,000-seat Huntington Park, and parks, office, residential, and commercial uses.



The City of Columbus has approximately 860,000 residents, and its metro area has approximately two million residents.





Facility Planning

The concept for EXPRESS LIVE! developed out of a desire to expand upon the successful indoor venue model, but add an outdoor component, similar to what had previously been developed with larger indoor/outdoor amphitheaters in the Philadelphia and Hartford markets. EXPRESS LIVE! was privately developed by PromoWest.

Facility Characteristics

EXPRESS LIVE! has a reversible stage that serves an outdoor amphitheater (capacity 5,200) and an indoor club (capacity 2,200). In addition to the two main event venues, The Basement is a 300-capacity club attached to the facility, and the 400-capacity A&R Music Bar is next door (both are also owned and operated by PromoWest).

The facility offers built-in sound and light equipment, which is fairly unique in that most venues have to rent this equipment or use what an artist tours with (either of these options requires expensive labor costs for setup and teardown). The built-in equipment is particularly efficient for private events. This "plug and play" aspect reduces operating and production costs (in many cases to less than



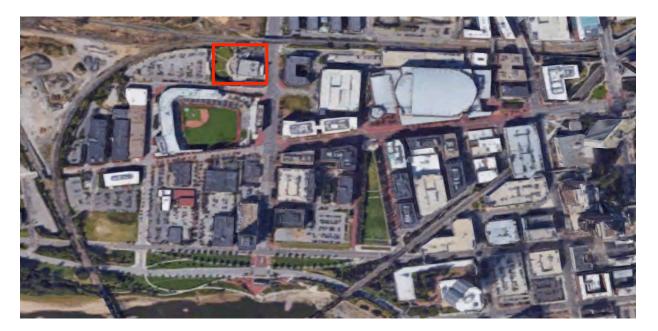




\$10,000 per event), which increases booking opportunities.

The facility is located within Columbus' 75-acre Arena District, which includes:

- o Nationwide Arena,
- o Huntington Park,
- o The 2.2-acre McFerson Commons Park,
- o Battelle Plaza,
- o More than 1,000 residential units,
- o 1.5 million square feet of Class-A office space, and
- o 300,000 square feet of retail, restaurant, and entertainment venues.

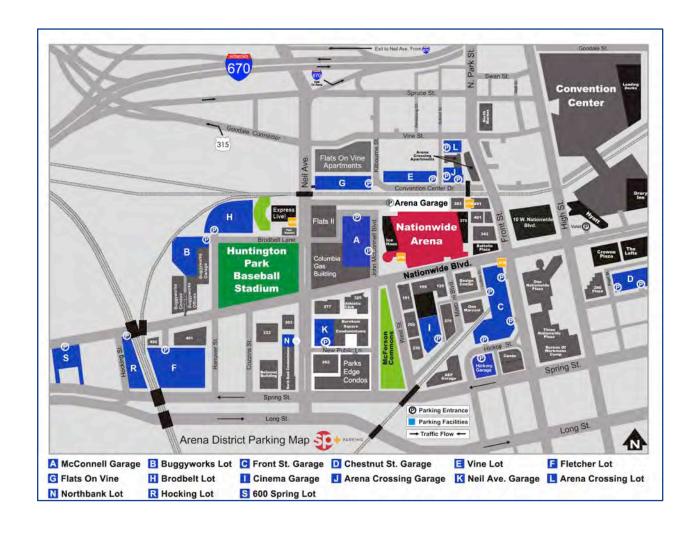


The Arena District has multiple parking lots and garages, as shown below in blue.













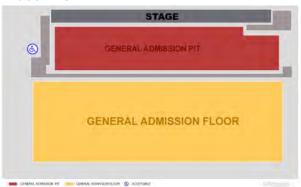


Seating charts for various configurations and setups are shown below.

Indoor – Reserved Seating



Indoor - GA



Indoor - WWE



Indoor - MMA



Outdoor - Reserved Seating



Outdoor - GA









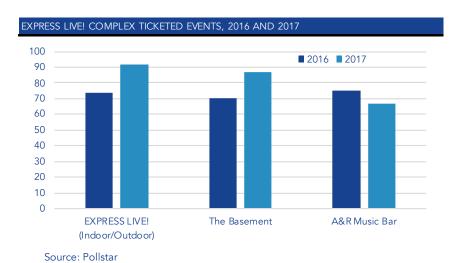
Facility Usage

The facility hosts a wide range of events, including concerts, festivals, sports, and private events such as weddings, proms, trade shows, social events, meetings, and others. Indoor events are held year-round, and outdoor amphitheater events are booked from May through September.

According to Pollstar, the facility hosted an average of 87 ticketed entertainment events per year in the last three years, with an average attendance of 2,091 and an average ticket price of \$32.60. Total annual attendance for these shows was more than 180,000. Virtually all of these events were concerts, although one WWE event was held.

In addition to events on the main stage (indoor and outdoor), The Basement has hosted 85 shows per year (with an average attendance of 199 and an average ticket price of \$13.60), and the A&R Music Bar has hosted an additional 67 shows (with an average attendance of 287 and an average ticket price of \$16).

Combined, the three venues hosted approximately 240 ticketed events per year, not including private/non-ticketed events.



Financial/Operating Information

The following information summarizes various financial and operational characteristics of EXPRESS LIVE!.

Management

The facility is owned and operated by PromoWest; the company also owns and operates the adjacent Basement and A&R Music Bar and Columbus' Newport Music Hall, as well as Pittsburgh's Stage AE







(which is modeled after EXPRESS LIVE!) and the Bunbury Music Festival in Cincinnati.

Premium Seating

EXPRESS LIVE! offers the following premium seating options:

- o VIP Box Suites these are sold on a season and event basis. Season suites include four tickets, a parking pass, personal cocktail service for outdoor concerts, Express VIP Lounge access for outdoor concerts (open patio seating, complimentary snacks, private bar and restrooms), priority ticket ordering for other PromoWest concerts, and other offers. On an individual event basis, the suites include four tickets, cocktail service for outdoor concerts, and Express VIP Lounge access.
- o VIP Party Box eight to 12 reserved seats, with personal cocktail service and Express VIP Lounge access for outdoor concerts,
- o VIP Party Deck 15 to 30 reserved seats, with personal cocktail service and Express VIP Lounge access.







STAGE AE

Pittsburgh, Pennsylvania

Stage AE is known as the second indoor/outdoor concert venue in the country, and is modeled after Columbus' EXPRESS LIVE!. Stage AE, like its Columbus cousin, is located in a destination district that is a major driver of the city's North Side as the "North

STAGE AE

Shore." The surrounding area includes PNC Park (home of the MLB Pittsburgh Pirates), Heinz Field (home of the NFL Pittsburgh Steelers and University of Pittsburgh football), the Carnegie Science Center, Rivers Casino Pittsburgh, and the Andy Warhol Museum.

The City of Pittsburgh has approximately 305,000 residents, and its metro area has nearly 2.4 million residents.





Facility Planning

The land under Stage AE is owned by a subsidiary of the Pittsburgh Steelers and Continental Development. The venue is owned and operated as joint venture between PromoWest and a subsidiary of the Steelers.

The original plan was to build an outdoor-only venue because an earlier boutique amphitheater on Pittsburgh's South Side was closing due to redevelopment and community backlash over sound issues. But the combination of the market needing a modern, year-round club and the desire of the developers to have something operating from January through March, when neither the Steelers or Pirates play, led to the indoor-outdoor design. The configuration of the venue, with outdoor sound facing the Ohio River, precluded sound issues from reoccurring in the community.

Facility Characteristics

Stage AE has three separate event spaces: the outdoor amphitheater (capacity 5,000), the indoor







Music Hall (capacity 2,300 for concerts, 450 for a seated events, and 1,500 for a standing event), and indoor Club at Stage AE (capacity 400). The indoor facility is 35,000 square feet. A single reversible stage is used for the amphitheater and Music Hall.

The outdoor amphitheater's pit accommodates 1,000 in a seated configuration and 2,500 for GA, and the lawn seats 3,000 in GA. Only one seated show has been held outdoors. The lawn is set at a five-percent grade. The total area of the outdoor amphitheater is 90,000 square feet (70,000 square feet for audience space and 20,000 square feet for the plaza, restrooms, and concessions).

Similar to EXPRESS LIVE!, Stage AE also has built-in sound and light equipment, which reduces the true hard costs of producing an event to approximately \$7,500.

The facility is located on Pittsburgh's North Shore, which includes a range of other developments and attractions, including:

- o The Pittsburgh Steelers' Heinz Field,
- o The Pittsburgh Pirates' PNC Park,
- o The Carnegie Science Center,
- o Rivers Casino Pittsburgh,
- o The Andy Warhol Museum,
- o The Children's Museum of Pittsburgh,
- o Five hotels,
- o Multiple restaurants, and
- o Multiple parking lots and garages (the facility does not have its own dedicated parking).







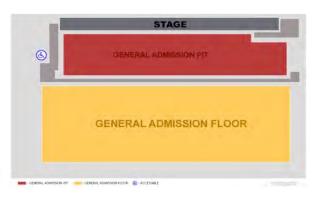


Seating charts for various configurations and setups are shown below.

Indoor - Reserved Seating



Indoor - GA



Indoor - Boxing



Indoor - MMA



Outdoor - Reserved Seating



Outdoor – GA





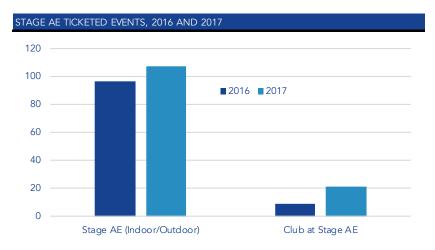




Facility Usage

Stage AE's configurations host a wide range of event types. Ticketed events are primarily concerts, but have also included festivals and an MMA match in recent years. Indoor concerts are booked year-round, and outdoor amphitheater concerts are held from May through September. Non-ticketed events have included social events, business events, fashion shows, bar mitzvahs, fundraisers, and others.

The following chart shows the reported number of ticketed events held at Stage AE's main stage (indoor and outdoor) and its Club configuration in 2016 and 2017.



Source: Pollstar

An average of approximately 100 Stage AE events have been held per year, with an average attendance of 1,785 and an average ticket price of \$32.54. The 400-seat Club has hosted nine and 21 concerts in the last two years, with an average attendance of 269 and an average ticket price of \$17.57.

According to the facility, additional information related to usage is as follows:

- o Approximately 190 events per year, with total attendance of 300,000 (225,000 ticketed),
- o Of the approximately 100 main stage shows, 70 are indoors and 30 are outdoors (the number of outdoor shows has ranged from 15 to 33),
- o 25 outdoor shows are scheduled for 2018,
- o 55 private events, with average attendance ranging from 150 to 10,000, and
- o 15 additional events related to Steelers and University of Pittsburgh football games at Heinz Field.







Financial/Operating Information

The following information summarizes various financial and operational characteristics of Stage AE.

Management

Similar to EXPRESS LIVE!, Stage AE is operated by PromoWest.

Premium Seating

Stage AE offers the following premium seating options:

- o Premium Boxes the facility has 29 indoor and 29 outdoor boxes, with four seats each. (American Eagle also has a dedicated outdoor box for 30 people.) Indoor box seats range from \$75 to \$150 each, and outdoor box seats are \$125 each.
- o Coors Light Party Deck for outdoor concerts, 32 reserved seats on an elevated platform behind the mix booth, with a small bar and chairs. The deck is sold for \$4,500 per show, and is also used for private events.

Sponsorships

- o AE, a brand of Pittsburgh-based American Eagle, purchased the facility's naming rights.
- o Other category sponsorships (including telecommunications, banking, and automobile) also generate significant revenues to the facility.

Operations

The facility's costs to open the venue are approximately \$7,500 for the main indoor stage, and \$17,500 for the amphitheater. Rates charged to facility renters are generally double the cost.







THE PAVILION AT TOYOTA MUSIC FACTORY

Irving, Texas

The Pavilion at Toyota Music Factory is an indoor-outdoor entertainment venue that is part of a 17-acre, more-than-\$200-million mixed-use development (Toyota Music Factory) in Irving. In addition to the Pavilion, the development includes a movie theater,



more than 20 restaurants and bars, and an outdoor plaza, and is next to the Irving Convention Center and multiple hotels.

The City of Irving has approximately 238,000 residents, and is part of the Dallas-Fort Worth Metroplex, which has approximately 7.4 million residents.



Facility Planning

In 2007, Irving voters agreed to contribute funding (\$40 million) towards an entertainment complex as well as the adjacent convention center (which opened in 2011). There was an identified need for local entertainment and attractions, as the area was primarily known for its office space. Developed by The ARK Group, the Toyota Music Factory opened in September 2017. The reported cost of the Pavilion was approximately \$40 million.

Facility Characteristics

The facility has indoor and outdoor capabilities, but unlike EXPRESS LIVE! and Stage AE, all performances face in the same direction. The smallest indoor capacity is 2,500 for performances, and that can be expanded to include another ring of seats that increases indoor capacity to 4,000. Beyond the indoor facilities, 65,000 square feet of outdoor lawn seating brings capacity to 8,000. Seating







expansions are made possible through retractable walls.

In addition, the Texas Lottery Plaza has a capacity of 1,500 for events.

The facility is located in Irving's Las Colinas neighborhood and includes the following:

- o Alamo Drafthouse Cinema a seven-screen movie theater.
- o Texas Lottery Plaza an outdoor plaza and performance space.
- o Restaurants and entertainment (more than 200,000 square feet) Bar Louie, Bar Manzanilla, Gloria's Latin Cuisine, C-Bar, Hwy 61 South, Martini Ranch, Texas Jamhouse & Marketplace, Boi Na Braza Brazilian Steak House, Burgerim, Freshii, Grimaldi's Coal Brick Over Pizzeria, Kabuki Japanese Restaurant, Kitchen 101, Nosh & Bottle Market, Pop Factory, TCBY, Thirsty Lion Gastropub & Grill, Top Round Roast Beef, Violet Room, and Yard House.
- o A planned 100,000 square feet of office space (which will be occupied by the Ethos Group).



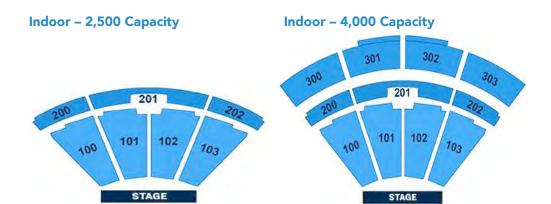
Event parking is available in two garages: the Toyota Music Factory Garage (adjacent to the facility) and the Urban Towers Garage (behind the facility). Self-parking is \$10 and valet parking is \$20.

Seating charts for various configurations and setups are shown below.









Outdoor - 8,000 Capacity



Facility Usage

In the facility's first eight months of operation, it hosted 59 ticketed events with an average attendance of 3,355 and an average ticket price of nearly \$55. Events were primarily concerts but also included five comedy shows, speakers such as Bill and Hillary Clinton, and musicals and festivals.

The facility also hosts private events such as meetings, charity events, and other entertainment.

Financial/Operating Information

The following information summarizes various financial and operational characteristics of the facility.







Management

Live Nation is the facility's operator and exclusive promoter.

Premium Seating

The facility includes the Toyota Lounge.

Sponsorships

- o The facility has ten founding partners (Toyota, the Texas Lottery, Verizon, Coors Light, Jim Beam, Coca-Cola, Direct Energy, Whataburger, ServiceKing, and Albertsons).
- o Toyota purchased naming rights for ten years (other terms are not available). The deal also includes the facility's VIP area, called the Toyota Lounge.









This section provides our market-based conclusions and their implications for the Event Center's potential usage, orientation, facilities, and other characteristics.

THE LOCAL MARKET

- o Virginia Beach is Virginia's largest city, with more than 450,000 residents, and is part of the larger Hampton Roads metro area with approximately 1.7 million residents. The Designated Market Area, as defined for this study, has 1.5 million residents and is strongly concentrated in Virginia Beach.
- o The DMA is relatively young, affluent, educated, and employed.
- o The DMA population is more likely than the average US market to attend concerts and many other types of entertainment events.
- o In addition to the full-time resident population, Virginia Beach is a major tourist market, with more than 15 million visitors in 2016. While local residents are expected to be the primary audience for most Event Center events, tourists do comprise a meaningful share of attendees at local venues such as the Sandler Center and Veterans United Home Loans Amphitheater. Events near the beach, which is one of the largest tourist attractions in Virginia Beach, should have a greater ability to capture tourists.

THE COMPETITIVE ENVIRONMENT

- o Entertainment venues have benefitted from technological changes in the music industry that have led to a significant increase in the value of live concerts to a performer's income. As a result, the number of shows has also increased significantly.
- o Demand for concerts has also increased (based on the number of tickets sold per year), despite rising ticket prices.
- o More than one-third of the top 200 grossing entertainment tours typically sell 5,000 or fewer tickets per show.
- o Locally, the need for a 2,500-to-3,500-seat commercial venue at the beachfront was identified in studies that led to the Sandler Center's development, although no such facility has been built. There appears to be a strong need for this type of facility in the market.
- o The Virginia Beach market has a number of indoor and outdoor venues that host free and ticketed entertainment events throughout the year. However, direct competition with the planned Event Center is expected to be relatively minimal:
 - o Four indoor theaters (which have capacities ranging from approximately 1,300 to 2,500) are generally used by their tenant groups and have limited available dates for







- commercial events. The primary indoor competition for the Event Center will be from Norfolk's Chrysler Hall and the NorVa and to a lesser extent, the Sandler Center.
- o Three indoor arenas have capacities of 9,000 or more and are generally oriented towards sporting events and arena-based concerts that are too large for the Event Center.
- o Of the market's two primary outdoor amphitheaters, one (Veterans United Home Loads Amphitheater) has a capacity of 20,000 and attracts the largest touring concerts, but can also host smaller shows in a pavilion-only configuration. Smaller shows are generarlly held there because of the lack of an alternative option with a more appropriate capacity. The Event Center's outdoor amphitheater would compete more directly with Portsmouth's Union Bank & Trust Pavilion, but the location of the Event Center is thought to be significantly better.
- o Both Virginia Beach and Norfolk also free events; Virginia Beach's is within walking distance of the Wave site at the Boardwalk. However, any free events at the Event Center is generally expected to complement, and not compete with, the city's Boardwalk programming.
- o The concept of building multipurpose entertainment venues in urban, mixed-use developments is popular, and indoor/outdoor venues that are similar to the Event Center have shown the ability to generate year-round usage and profitability.

EVENT CENTER IMPLICATIONS AND RECOMMENDATIONS

- o We believe that there is a market for both indoor and outdoor events at the capacities being considered (up to approximately 3,200 indoors and 5,000 outdoors).
- o The flexibility for various configurations for indoor events offer artists and promoters a wide variety of options, such as general admission, seated, cabaret, and/or a combination of multiple configurations.
- o The involvement of OVG is considered to be a significant positive factor for the facility, based on the firm's resources and relationships; experience with facility planning, management, and prgoramming; marketing and sponsorships; and other aspects of facility and event operations. In addition, OVG's primary representative for the project has significant experience in the local market.
- o The planned smaller facilities within the Event Center, such as VIP seating and rooftop terraces, will fill a niche and provide additional opportunities to generate revenue on event and non-event days on the main stage.
- o It is likely that most of the commercial events that would be held at the Event Center will be new to the market. However, the Event Center could attract some events that would otherwise be held at existing local facilities such as Chrysler Hall and the NorVa in Norfolk and the Union Bank & Trust Pavilion in Portsmouth.







- o Virginia Beach is well-located for touring events, in relation to markets such as Richmond, Charlotte, Washington DC/Baltimore, and others.
- o The facility's planned open booking policy will help to increase usage and encourage all promoters to book shows. Multiple promoters that are active locally (including those that book and operate existing facilities) have expressed interest in using the new facility.
- o The planned built-in sound and light capabilities of the Event Center will make the facility more efficient and cost-effective to attract and produce events with minimal extra cost. Many smaller touring shows, for example, do not travel with their own production equipment and would otherwise require more expensive equipment rentals. It will also make the venue more attractive for private events.
- o The outdoor component of the Event Center is expected to host both ticketed and free events. While this is possible, it will require advance planning and have operational implications to the facility and the surrounding development:
 - o Seating lawn for free events and festivals, the seating area would likely be relatively flat. However, as an amphitheater with ticketed shows, a lawn would ideally have a grade of five to seven percent.
 - For a capacity of approximately 5,000, a total of approximately 90,000 square feet is recommended (for both seating areas and support space/circulation). Reducing the outdoor footprint to 70,000 square feet would reduce capacity to approximately 3,500.
 - O Controlled area for ticketed events, the facility will need to be separated from the rest of the development in order to limit access to ticketholders only. This would require permanent or temporary fencing, access to restrooms and concessions, and other infrastructure. This may also require relocating a public walkway and closing streets.
 - o Surrounding development should a controlled area be in place (temporarily or permanently), the developer/operator would need a policy related to access to other attractions at the Wave (such as restaurants) on event days.
 - o Sound due to the expected sound levels (particularly from paid shows), the developer/operator should proactively plan for decibel limits and curfews related to the surrounding development and neighborhood.
 - Other the outdoor stage should extend 14 feet from the building, with a ground-accessible ramp, roof, and downstage rigging.

We assume that these matters will be satisfactorily addressed and will allow the Event Center to host a significant level of both ticketed and free events outdoors.



Section 6
Operational
Projections







In this section, we summarize forecasts of future operations of the Event Center, based on the assumptions described in the previous section. Operating projections are based primarily on the following:

- o Recommendations/assumptions for a new facility,
- Interviews with industry professionals and other stakeholders,
- o Our team's experience in the operations of facilities and events, and
- o Analysis of the operations of comparable facilities.

FUTURE EVENT CENTER OPERATIONS

Based on our previous tasks (including stakeholder interviews, analysis of comparable facilities, and recommendations for a new facility), we have forecasted the future operations of the assumed facility. The projection period covers the first ten years of the facility's operations, and for the purposes of inflation, we assume that the new facility will open in 2020.

Our projection is based on all potential uses of the components of the Event Center, including its main stage (indoor and outdoor) as well as smaller facilities within the Event Center and uses associated with the adjacent surf park.

Event and Attendance Demand

The following tables summarize our estimates of annual events and attendance (per-event averages and totals) for the facility's first ten years. These estimates are based on our market research, including interviews with potential facility users and analysis of comparable facilities.







PROJECTED ANNUAL EVENTS

Concerts - Indoor Reserved	30
Concerts - Indoor GA	40
Concerts - Outdoor	20
Concerts - Minor	40
Other Ticketed Sports/Entertainment	5
Community Events	32
Private/Social Events	50
Festivals	3
Surf Park Events	3
TOTAL	223

Source: Stone Planning

PROJECTED AVERAGE ATTENDANCE

2,167
2,719
3,600
300
2,250
1,500
250
3,000
500

Source: Stone Planning

PROJECTED TOTAL ATTENDANCE

Concerts - Indoor Reserved	65,000
Concerts - Indoor GA	108,750
Concerts - Outdoor	72,000
Concerts - Minor	12,000
Other Ticketed Sports/Entertainment	11,250
Community Events	48,000
Private/Social Events	12,500
Festivals	9,000
Surf Park Events	1,500
TOTAL	340,000

Source: Stone Planning

As the tables show, total annual attendance is estimated to be 340,000 per year, based on approximately 225 events per year. In general, we have assumed that approximately half of the







facility's ticketed events will be promoted in-house and half will be rented to other promoters; this, and other assumptions, are described in more detail below.

Ticketed Indoor Concerts (Reserved and General Admission)

Event and attendance data for local indoor venues, and others with indoor capabilities, are shown in Sections 3 and 4. The following table shows event and attendance data for a range of indoor clubs across the country with capacities ranging from 2,000 to 3,000.

Facility Name	ame Location		Average Attendance	Capacity	% of Capacity	
Diamond Ballroom	Oklahoma City	48	858	2,200	39.0%	
Echostage	Washington DC	46	2,803	3,000	93.4%	
Electric Factory	Philadelphia	82	1,904	2,600	73.2%	
Fillmore Charlotte	Charlotte	93	1,480	2,000	74.0%	
Fillmore Detroit	Detroit	83	2,077	2,888	71.9%	
Fillmore Philadelphia	Philadelphia	102	2,229	2,500	89.2%	
House of Blues	N. Myrtle Beach	46	1,330	2,067	64.3%	
House of Blues	Boston	167	1,900	2,425	78.4%	
The Palladium	Worcester, MA	61	1,416	2,660	53.2%	
Stereo Live	Houston	23	1,482	2,078	71.3%	
Minimum		23	858	2,000	39.0%	
Average		75	1,748	2,442	70.8%	
Maximum		167	2,803	3,000	93.4%	

Source: Pollstar, Stone Planning

These clubs hosted 23 to 167 shows in 2017, with an average of 75. The attendance average was approximately 1,750 (or 71 percent of capacity), with a wide range of results.

In Virginia Beach, we assume a total of 70 indoor shows per year, with an overall average attendance of approximately 2,500 (the maximum capacity for seated shows is expected to be 2,400, and 3,200 for GA shows). We assume that more than half of the indoor concerts will be in a GA configuration. Further, we assume that half of the GA shows and half of the reserved shows will be promoted inhouse (the financial implications of self-promotion vs. rental are described later in this section).

Ticketed Outdoor Concerts

These events are typically touring concerts that will be held at the outdoor amphitheater component of the venue, similar to events at the VUHLA and Union Bank & Trust Pavilion. Event and attendance data for similar outdoor venues locally and in other markets are shown in Sections 3 and 4, and the following table shows additional event and attendance data for outdoor amphitheaters with capacities of approximately 4,000 to 7,000 across the country. In general, these facilities have outdoor components only, and are in a variety of market sizes with differing competitive environments.







Facility Name	Location		Average Attendance	Capacity	% of Capacity	
Ascend Amphitheater	Nashville	39	5,008	6,800	73.6%	
Blue Hills Bank Pavilion	Boston	52	3,812	5,000	76.2%	
Cal Coast Credit Union Open Air Theatre	San Diego	25	3,267	4,635	70.5%	
Charlotte Metro Credit Union Amphitheatre	Charlotte	30	2,996	4,983	60.1%	
Chene Park Amphitheatre	Detroit	28	3,038	6,000	50.6%	
Cuthbert Amphitheater	Eugene, OR	26	3,160	5,000	63.2%	
Daily's Place Amphitheater	Jacksonville	33	3,392	5,500	61.7%	
Fraze Pavilion	Kettering, OH	39	2,386	4,300	55.5%	
Jacobs Pavilion At Nautica	Cleveland	21	2,758	4,600	60.0%	
Koka Booth Amphitheatre	Cary, NC	11	4,351	7,000	62.2%	
Marymoor Park	Marymoor, WA	21	4,034	5,000	80.7%	
Pinewood Bowl Theater	Lncoln, NE	8	3,498	5,500	63.6%	
PNC Pavilion At Riverbend	Cincinnati	19	2,599	4,100	63.4%	
Red Hat Amphitheater	Raleigh	35	3,521	5,500	64.0%	
Rose Music Center At The Heights	Huber Heights, OH	28	2,692	4,200	64.1%	
State Bank Amphitheatre At Chastain Park	Atlanta	34	3,906	6,900	56.6%	
Minimum		8	2,386	4,100	50.6%	
Average		28	3,401	5,314	64.1%	
Maximum		52	5,008	7,000	80.7%	

Source: Pollstar, Stone Planning

As the table shows, the average facility hosted 28 concerts, which is generally considered to be a fairly full season of outdoor shows (only three facilities had more than 35 events, and most were between approximately 20 and 35). Average attendance at these facilities was approximately 3,400, or 64 percent of capacity.

We assume a total of 20 outdoor amphitheater concerts per year at the Event Center, with an average attendance of 3,600 (or approximately 70 percent of capacity). Similar to indoor concerts, we assume that half of these shows will be self-promoted and half will be rentals.

Ticketed Concerts - Minor

We also assume that the facility will host smaller concerts in its other facilities, such as the third- and fourth-floor decks and hospitality room (indoors and outdoors). Based on their planned sizes and capacities, we assume that these areas will host 40 minor concerts per year, with an average attendance of 300.

Other Ticketed Events - Sports/Entertainment

As previously described, the indoor component of the Event Center can also be configured for events such as boxing/MMA, comedy, speakers, and other entertainment events. We assume a total of five such events per year (all of which will be rentals), with an average attendance of 2,250.







Community Events

This category includes free programming events that would generally take place at the outdoor venue. We assume an average of one non-ticketed event per week from April through November, with an average attendance of 1,500 per week.

Private/Social Events

These events can include banquets, corporate events, weddings, bar mitzvahs, holiday parties, and others, and are generally assumed to be held in the main indoor facility but could also be held on the outdoor decks or hospitality room. We assume a total of 50 such events per year (all of which will be rentals), with an average attendance of 250.

Festivals

We assume the facility will host three one-day festivals per year, with an average attendance of 3,000. As described earlier in this report, it is expected that Pharrell Williams will help to develop at least one festival for the facility.

Surf Park Events

We assume that the Event Center's decks and hospitality room will be used for three surf park events per year, with an average attendance of 500.

Operating Revenues and Expenses

Based on forecasted event and attendee demand, operations of similar facilities, other aspects of the market analysis, and our team's experience with facility and event operations, we have prepared a ten-year projection of operating revenues and expenses for the assumed facility. The following describes the assumptions and methodology used to estimate the financial performance of the project, beginning with a pro forma financial statement that summarizes projecting operating revenues and expenses, and the assumed annual net revenue. (For all items, we assume a two-percent inflation rate per year, unless otherwise indicated.)

The new facility's projected financial statement for its first ten years is shown below.







	2020	2021	2022	2023	2024	2025	2026	2027	2028	202
Operating Revenues										
Event Revenues										
Tickets (from Promoted Shows)	\$4,512	\$4,603	\$4,695	\$4,789	\$4,884	\$4,982	\$5,082	\$5,183	\$5,287	\$5,393
Promoter Profit	4	4	4	4	4	4	4	4	4	
Facility Fee	810	810	810	810	810	810	810	810	810	810
Box Office Fee	125	125	125	125	125	125	125	125	125	12
Convenience Fee	591	591	591	591	591	591	591	591	591	59
Event Expense Reimbursement	378	386	393	401	409	417	426	434	443	452
Net F&B	1,988	2,028	2,069	2,110	2,152	2,195	2,239	2,284	2,330	2,37
Net Merchandise	88	89	91	93	95	97	99	101	103	10
Non-Event Revenues										
Premium Seating (Premium Portion)	\$167	\$171	\$174	\$178	\$181	\$185	\$188	\$192	\$196	\$200
Season Tickets (Premium Portion)	45	46	47	48	49	50	51	52	53	5-
VIP Club	23	24	24	25	25	26	26	27	27	2
Naming Rights	364	371	379	386	394	402	410	418	427	43
Other Advertising/Sponsorships	182	186	189	193	197	201	205	209	213	21
Other Revenues	16	16	16	17	17	17	18	18	18	1
Total Operating Revenues	\$9,294	\$9,449	\$9,607	\$9,769	\$9,934	\$10,102	\$10,274	\$10,449	\$10,627	\$10,809
Operating Expenses										
Event Expenses										
House Expenses	\$2,674	\$2,728	\$2,782	\$2,838	\$2,895	\$2,953	\$3,012	\$3,072	\$3,133	\$3,19
Talent Fees	2,601	2,653	2,706	2,760	2,815	2,872	2,929	2,988	3,047	3,10
Advertising	821	838	855	872	889	907	925	944	962	98
Catering	362	369	376	384	391	399	407	415	424	43
Other	183	187	191	194	198	202	206	210	215	21
Non-Event Expenses										
Salaries and Benefits	\$709	\$723	\$737	\$752	\$767	\$783	\$798	\$814	\$830	\$84
Utilities	390	398	406	414	422	431	439	448	457	46
Repairs and Maintenance	156	159	162	166	169	172	176	179	183	18
G&A	130	133	135	138	141	144	146	149	152	15
Insurance	112	114	116	118	121	123	126	128	131	13
Total Operating Expenses	\$8,138	\$8,301	\$8,467	\$8,636	\$8,809	\$8,985	\$9,165	\$9,348	\$9,535	\$9,72
P 9 P										

Source: Stone Planning

As the table shows, in the first year, the Event Center's projected net operating income is approximately \$1.2 million, based on \$9.3 million in revenues and \$8.1 million in expenses. This NOI is projected to remain relatively consistent at \$1.1 million per year.

Descriptions of individual line items, and major underlying assumptions, appear below.

Operating Revenues

Event Revenues

Tickets (from Promoted Shows)

This line item includes revenues from the sale of tickets from shows promoted by the facility. Most of







this revenue is a passthrough, and there is a corresponding expense for the share of ticket revenue that is paid to performers at these events. Revenue is calculated as paid attendance multiplied by the average ticket price. It is initially collected by the facility/promoter but the majority is then paid to the performer. A sample of average ticket prices at similar outdoor amphitheaters and indoor clubs is shown below.

AVERAGE TICKET PRICES OF SELECTED AMPHITHEATERS AND CLUBS							
Amphitheater Name	Location	Capacity	Average Ticket Price				
Ascend Amphitheater	Nashville	6,800	\$40.70				
Blue Hills Bank Pavilion	Boston	5,000	\$49.26				
Cal Coast Credit Union Open Air Theatre	San Diego	4,635	\$41.33				
Charlotte Metro Credit Union Amphitheatre	Charlotte	4,983	\$34.48				
Chene Park Amphitheatre	Detroit	6,000	\$44.74				
Cuthbert Amphitheater	Eugene, OR	5,000	\$35.86				
Daily's Place Amphitheater	Jacksonville	5,500	\$60.65				
Fraze Pavilion	Kettering, OH	4,300	\$35.58				
Jacobs Pavilion At Nautica	Cleveland	4,600	\$39.07				
Koka Booth Amphitheatre	Cary, NC	7,000	\$41.27				
Marymoor Park	Marymoor, WA	5,000	\$46.04				
Pinewood Bowl Theater	Lncoln, NE	5,500	\$49.11				
PNC Pavilion At Riverbend	Cincinnati	4,100	\$48.28				
Red Hat Amphitheater	Raleigh	5,500	\$37.00				
Rose Music Center At The Heights	Huber Heights, OH	4,200	\$49.17				
State Bank Amphitheatre At Chastain Park	Atlanta	6,900	\$55.27				
Minimum		4,100	\$34.48				
Average		5,314	\$44.24				
Maximum		7,000	\$60.65				

Club Name	Location	Capacity	Average Ticket Price	
Diamond Ballroom	Oklahoma City	2,200	\$25.57	
Echostage	Washington DC	3,000	\$37.57	
Electric Factory	Philadelphia	2,600	\$33.92	
Fillmore Charlotte	Charlotte	2,000	\$29.19	
Fillmore Detroit	Detroit	2,888	\$35.29	
Fillmore Philadelphia	Philadelphia	2,500	\$33.51	
House of Blues	N. Myrtle Beach	2,067	\$25.28	
House of Blues	Boston	2,425	\$33.53	
The Palladium	Worcester, MA	2,660	\$28.68	
Stereo Live	Houston	2,078	\$34.63	
Minimum		2,000	\$25.28	
Average		2,442	\$31.72	
Maximum		3,000	\$37.57	

Source: Pollstar, Stone Planning

Assumed average ticket prices (for ticketed events only) for the Event Center are shown below.







ASSUMED AVERAGE TICKET PRICES (PROMOTED EVENTS)

Concerts - Indoor Reserved	\$42.00
Concerts - Indoor GA	\$32.00
Concerts - Outdoor	\$46.00
Concerts - Minor	\$16.00
Other Ticketed Sports/Entertainment	\$38.00

Source: Stone Planning

Total ticket revenues from promoted shows are estimated to be approximately \$4.5 million in 2020. As previously described, much of this revenue will be passed along to performers (as shown later in this section).

Promoter Profit

For ticketed events promoted by the facility, we assume that it will retain a profit of 15 percent of any ticket revenues greater than show expenses. For some events, expenses will exceed revenues and the facility will lose money on promotion (but profit from ancillary revenues such as F&B and fees). Overall, we assume that the facility, as a promoter, will generate a small profit on an annual basis.

Facility/Ticket Fees

For ticketed events at the facility, we assume three types of fees that could potentially be added to a ticket price:

- o Facility Fee this would enacted by the facility as an additional revenue source that could be used or justified to help fund ongoing operations, and although not all facilities charge a facility fee, it is common. In the Virginia Beach market, examples of facility fees are \$1 to \$2 at the Sandler Center, \$2 at the NorVa, and \$9 at the VUHLA (which includes parking) and \$1 for parking at the Union Bank & Trust Pavilion. Not including parking charges, fees at other clubs and amphitheaters are typically \$5 or less.
- o Box Office Fees are charged for ticket sales at the physical box office, which generally represent the minority of sales. However, a fee for box office operations and staffing is common; the Ferguson Center charges \$6 for box office ticket sales.
- o Convenience/Service Fees are similar to box office fees but are charged for online and phone ticket sales. These charges generally increase as a ticket price increases, and unlike facility and box office fees, convenience fees are generally shared with a ticketing partner that provides the service. Locally, the Ferguson Center's convenience fee ranges from \$3 to \$25, and review of tickets for sale at the VUHLA, NorVa, and Union Bank & Trust Pavilion indicate convenience fees in the range of approximately 20 to 50 percent of a ticket's price. In addition, the VUHLA and Union Bank & Trust Pavilion also charge a flat order processing fee of \$4 and \$3.55, respectively.







Our assumptions regarding per-ticket fees, including the fees charged, the percent of tickets that a fee applies to, and revenue sharing, are summarized below. For the facility fee, we assume that \$1 of the total fee is allocated for parking. These fees are not inflated in later years of the projection.

	Facility	Facility Fee		Box Office Fee			Convenience Fee		
	Per-Ticket Fee	% to Facilty	Per-Ticket Fee	% Sold at BO	% to Facilty	Per-Ticket Fee	% Sold Online/ Phone	% to Facilty	
Concerts - Indoor Reserved	\$3.00	100%	\$3.00	15%	100%	\$5.00	85%	50%	
Concerts - Indoor GA	\$3.00	100%	\$3.00	15%	100%	\$5.00	85%	50%	
Concerts - Outdoor	\$3.00	100%	\$3.00	15%	100%	\$5.00	85%	50%	
Concerts - Minor	\$1.00	100%	\$3.00	15%	100%	\$5.00	85%	50%	
Other Ticketed Sports/Entertainment	\$3.00	100%	\$3.00	15%	100%	\$5.00	85%	50%	
Community Events	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
Private/Social Events	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
Festivals	\$3.00	100%	\$3.00	15%	100%	\$5.00	85%	50%	
Surf Park Events	n/a	100%	n/a	n/a	n/a	n/a	n/a	n/a	

Source: Stone Planning

Combined, the facility's share of facility, box office, and convenience fees are estimated to be approximately \$1.5 million in the facility's first year.

Event Expense Reimbursement

Event expenses are described in more detail below, but generally represent the cost of hosting an event and include ushers, box office, stage hands, and other items. We assume that these expenses will generally be marked up by 20 percent to 33 percent for commercial events that are rented to other promoters, but are charged at cost for community events. This revenue is estimated to range from approximately \$380,000 to \$450,00 per year.

Net Concessions/Merchandise

The facility will also generate revenue from food and beverage and merchandise sales. For F&B, the per-attendee spending will vary from event to event, as well as from show to show within a certain event category (for example, F&B sales for a hard rock concert would generally exceed those for a Christian concert). We have reviewed the F&B sales of similar venues in order to guide our assumptions for per-capita spending. Also, we assume that this service will be provided in-house and that the associated cost of goods sold will be 55 percent.

Similarly, attendees can also buy various kinds of event-related merchandise at events, although the vast majority of this revenue will be retained by the performer or event (the facility will typically receive a commission of 10 to 20 percent, depending on whether the facility or promoter provides the associated labor).

Our assumptions regarding per-capita sales and the facility's net share of sales are summarized below.







PER-CAPITA F&B AND MERCHANDISE ASSUMPTIONS									
	F	&B	Merchandise						
	Per-Capita Sales	% to Facility	Per-Capita Sales	% to Facility					
Concerts - Indoor Reserved	\$8.00	55%	\$3.00	10%					
Concerts - Indoor GA	\$8.00	55%	\$3.00	10%					
Concerts - Outdoor	\$12.00	55%	\$3.00	10%					
Concerts - Minor	\$8.00	55%	\$1.50	10%					
Other Ticketed Sports/Entertainment	\$10.00	55%	\$3.00	10%					
Community Events	\$10.00	55%	n/a	n/a					
Private/Social Events	\$30.00	55%	n/a	n/a					
Festivals	\$15.00	55%	\$5.00	n/a					
Surf Park Events	\$15.00	55%	\$5.00	n/a					

Source: Stone Planning

In the facility's first year, net F&B and merchandise revenues are estimated to be approximately \$2.0 million and \$88,000, respectively.

Non-Event Revenues

Premium Seating

We assume that the facility will have ten outdoor and ten indoor boxes that can be leased on an annual basis. Boxes that are not leased can be rented on an event basis.

Assumptions regarding the indoor boxes are as follows:

- o the boxes will accommodate an average of five people each (such as half for four people and half for six people),
- o 80 percent will be leased annually,
- o the annual rate begins at \$15,000 (to be inflated in later years), not including tickets,
- o for any available boxes, 50 percent will be rented on an event basis for \$250 (not including tickets), and
- o an assumed 10 percent of revenues for sales expenses/commissions.

Assumptions regarding the outdoor boxes are as follows:

- o the boxes will accommodate an average of five people each (such as half for four people and half for six people),
- o 100 percent will be leased annually,
- o the annual rate begins at \$5,000 (to be inflated in later years), not including tickets,







- o for any available boxes, 50 percent will be rented on an event basis for \$500 (not including tickets), and
- o an assumed 10 percent of revenues for sales expenses/commissions.

Based on these assumptions, net premium seating revenues are projected to be approximately \$170,000 to \$200,000 per year.

Season Tickets

We assume that the facility will sell 100 season tickets per year for outdoor concerts, with an average per-ticket price of \$70 (which is a premium over the average outdoor ticket price of \$45). This \$35 premium is considered to be the season ticket revenue, and is estimated to be approximately \$45,000 to \$55,000 per year.

VIP Club

We assume that the facility will have a version of a VIP/membership club that will provide benefits such as early access to tickets, experiences, preferred parking/entrances, and others. For the purposes of this projection, we assume 100 members pay an annual fee of \$250 (not including any tickets), with an associated facility cost of 10 percent. As a result, estimated net revenue is approximately \$23,000 to \$28,000 per year.

Naming Rights

We assume the Event Center will have a naming rights sponsor (and could potentially have different naming sponsors for the indoor and outdoor components of the facility). Based on the naming rights revenues of other indoor and outdoor facilities, we assume that the Event Center generates a gross total of \$350,000 per year, less 10 percent of associated costs, and this amount is inflated in later years.

Other Advertising/Sponsorships

Facilities such as the Event Center will typically have multiple sponsors other than a naming sponsor. These could include a naming sponsor of an annual concert series, signage, pouring rights (alcoholic and non-alcoholic), and other companies that can have exclusive or non-exclusive rights in a category such as banking, healthcare, and others.

Based on the planned orientation and usage of the Event Center, as well as the sponsorship revenues of other similar facilities, we estimate approximately \$180,000 in non-naming sponsorships in the facility's first year, net of associated costs (to be inflated in later years).







Other Revenues

Other revenues include smaller amounts that are not captured in other line items, such as ATM fees and others. We assume that these revenues will be \$15,000 per year.

Total Operating Revenues

Based on the assumptions described above, we estimate that total facility revenues will be approximately \$9.3 million in 2017 and increase to \$10.8 million in 2029.

Expenses

Event Expenses

House Expenses

As described above, these expenses represent the expenses associated with the operation of events, and range from \$2,500 to \$5,000 for smaller events, to \$15,000 for indoor concerts and \$35,000 for outdoor concerts. There is generally a markup charged to events and an associated revenue; however, the expenses are estimated to be approximately \$2.7 million in the facility's first year.

Talent Fees

Talent expenses represent the share of ticket sales that are paid to the performers at the facility from promoted concerts. Because the performer will typically be paid a guaranteed, predetermined amount before tickets are sold, their share of ticket revenues (as a percent) will vary based on how many tickets are ultimately sold and at what prices. For some shows, ticket sales will be less than an artist's guarantee; other times, strong ticket sales will generate excess revenues for a facility. Overall, approximately 66 of ticket sales will be paid to performing artists, which is consistent with the share of fees paid to performers at other facilities.

Advertising

We assume that the facility's advertising expenses for individual events will range from \$1,000 for community events, to \$5,000 to \$10,000 for indoor and outdoor concerts, to \$25,000 for festivals. Based on the assumed number of events, total advertising expenses are estimated to begin at approximately \$820,000.







Catering

Backstage catering expenses will also vary from event to event, and are assumed to range from \$1,000 for minor concerts, to \$3,000 for major concerts and \$7,500 for festivals. Based on the number of events, catering expenses are estimated to be approximately \$360,000 in the facility's first year.

Other Expenses

We assume that other, miscellaneous expenses on a per-event basis will range from \$500 to \$5,000, and will total approximately \$183,000 in the facility's first year.

Non-Event Expenses

Salaries and Benefits

We assume a full-time staff of ten people, as described below. Assumed salaries and benefits (25 percent of salaries) are also shown.

ASSUMED STAFFING PLAN	
GM	\$85,000
Ops Manager	50,000
Production Manager	45,000
Marketing Director	60,000
Sales Director	70,000
BO Manager	50,000
Business Manager	60,000
Receptionist	30,000
Customer Service	45,000
F&B Manager	50,000
Total Salaries	\$545,000
Benefits	\$136,250
TOTAL SALARIES/BENEFITS	\$681,250

Source: Stone Planning

In the facility's first year, salaries and benefits expense is assumed to be approximately \$710,000. This amount is inflated in later years.

Utilities

We estimate that utilities expenses will be approximately \$390,000 in the facility's first year, based on the expenses of other facilities and the planned usage of the Event Center.







Repairs and Maintenance

We estimate that repairs and maintenance expenses will be approximately \$155,000 in the facility's first year, based on the expenses of other facilities and the planned usage of the Event Center.

General and Administrative

We estimate that G&A expenses (for items such as travel and entertainment, supplies, uniforms, and others) will be approximately \$130,000 in the facility's first year, based on the expenses of other facilities and the planned usage of the Event Center.

Insurance

We assume that general liability insurance will be \$0.25 per attendee and property insurance will be \$100 per event, and a total of approximately \$110,000 in the facility's first year.

Total Expenses

Based on the assumptions described above, we estimate that total expenses will be approximately \$8.1 million in 2020 and increase to \$9.7 million in 2029.

Net Operating Income (Loss)

Based on the estimated revenues and expenses, net operating income is projected to be approximately \$1.1 million per year.









This section estimates the economic and fiscal impacts that would be captured in Virginia Beach based on the construction and operations of the Event Center. The impact analysis focuses on one future year of impacts, which would recur on an annual basis but vary based on actual facility demand.

THE CONCEPT OF ECONOMIC IMPACTS

In general, economic impacts estimate the incremental spending, as well as the resulting jobs, income, and tax revenues, that are captured by a geographic area as a result of an event. In this case, "event" can refer to anything ranging from a weather event to the presence of an institution, industry, or facility, to an event such as a concert. For the purposes of this analysis, the event is the construction and ongoing operations of the Event Center in Virginia Beach.

For an entertainment venue, economic impacts to an area (such as Virginia Beach) are generally considered to be based on the spending of non-local residents that come to the area primarily for the purpose of attending a facility event. As an example, the spending by a Virginia Beach resident who attends a concert at the Event Center is considered to be part of the <u>economic activity</u> created by the facility, but not the <u>economic impacts</u>. A Norfolk resident who travels to Virginia Beach for an event would generate economic impacts from her visit. However, although local residents' spending at the facility is not considered to be part of the economic impacts, some of this spending could technically be considered an impact, as the Event Center will bring some shows (and the associated spending) to Virginia Beach that have previously gone to Portsmouth and Norfolk.

Also, if a New York resident travels to Virginia Beach for a beach vacation, and happens to attend an Event Center event while in town, his impact would be credited to other tourism and not the Event Center or its event. Because Virginia Beach is such a popular tourist destination, these tourists will create economic activity from their facility attendance but will be separated from the economic impacts.

Economic impacts that can be estimated include the following:

o Spending – for a new facility, this includes the actual spending by event attendees for purchases of tickets, food and drinks, merchandise, and other items, both within the facility and throughout the city. The spending that is captured locally (which would not include ticket sales that are retained by a non-local artist but does include spending at a local restaurant) is part of a facility's economic impacts.

This spending can be separated into <u>gross</u> and <u>net</u> impacts. Gross impacts include the spending by local residents, as described above, and can be considered the full economic activity associated with an arena. This spending by local residents is considered to be







"transfer spending" that would have otherwise been spent locally (for example, at a movie), although some would likely leave the area for entertainment in other markets. Net impacts, which are a subset of gross impacts, only include the spending by non-local residents.

- o Jobs and Income these impacts estimate new employment and the associated income earned by local residents as a result of the new spending described above. For example, spending captured at local restaurants will support that industry's employment base and will lead to income for its employees.
- Fiscal impacts represent new tax revenues that are created by the spending impacts. Tax
 revenues, particularly at the local level, can include amusement taxes from ticket sales and
 hotel taxes from hotel stays.
- Construction impacts in addition to the impacts generated from operations, the construction of the facility will also create economic and fiscal impacts, to the extent that local firms and individuals participate in the construction project.

In addition to the direct spending impacts, economic multipliers are applied to estimate later rounds of spending before the initial spending leaves the local economy. For example, some of the spending captured by a local restaurant is then spent on various items to support the restaurant's operations, and these multipliers estimate the amount that is spent locally based on the presence of suppliers and other industry partners within a geographic area. This later spending – or indirect impacts – are added to the direct impacts to estimate total impacts.

ECONOMIC IMPACTS FROM OPERATIONS

We estimate the economic impacts generated by one year of facility operations, as described below.

Facility Revenues

The revenues generated by the facility can represent a significant part of the overall economic activity that it creates. This revenue includes spending for items such as tickets, concessions, and others that are described and shown in the financial analysis of facility operations, although some of these revenues are retained by an event, promoter, and/or artist rather than the Event Center.

The following table summarizes the gross revenues generated by facility operation, regardless of the ultimate recipient of the revenues. These gross revenues are considered separately for the source of the spending and their recipients later in this section.







GROSS REVENUES GENERATED BY THE FACI	LITY (\$000s)
Gross Ticket Sales	\$10,142
Promoter Profit	4
Gross Food and Beverage Sales	3,475
Gross Merchandise Sales	834
Naming Rights	364
Other Advertising and Sponsorships	182
Facility/Ticket Fees	1,526
Event Expense Reimbursement	378
Premium Seating (Premium Portion)	186
Season Tickets (Premium Portion)	50
VIP Club	26
Other	16
TOTAL	\$17,182

Source: Stone Planning

The amounts in the table do not necessarily match those in the pro forma statement; for example, while the Event Center is estimated to capture \$4.5 million in ticket revenues from its promoted shows, the \$10.1 million shown above represents ticket sales from all facility events. In addition, net F&B and merchandise sales are shown in the pro forma, while gross amounts are considered here.

Attendee Spending Outside of the Facility

The other component of the economic activity generated by a facility's operation is the money spent by event attendees on items such as lodging, transportation, meals, entertainment, and shopping outside of the facility but as a result of their trip to the facility.

Based on analysis of event characteristics at other similar facilities, the geographical characteristics of the region, and others, we have made assumptions regarding the geographic origin of attendees, whether they stay in Virginia Beach overnight, and their spending characteristics outside of the Event Center (spending within the facility is included as facility revenue above).

Attendees' Geographic Origin

Because impacts are being considered for Virginia Beach, we differentiate between facility attendees who are city residents and those who live outside of the area. Spending by all attendees is calculated as the gross spending impact; however, only those who are non-local residents are considered in the calculations of net economic impacts, which are the true impacts to the city.

For these assumptions, we have primarily based our estimates on characteristics of actual attendees from past events at other facilities, as well as other events held at other facilities in the area, based on available data. While many factors can influence the share of non-local attendees at a facility, and this percentage can vary widely from event to event, we have assumed average characteristics across each event type. For Event Center events, we assume that the share of local attendees and tourists







that are in town for reasons other than a facility event will range from 40 to 70 percent. Events such as surf-related events and festivals are assumed to have more non-local attendees than events such as minor concerts and community events.

Types of Travelers

Event attendees are further divided into two other categories: daytrippers or overnight travelers. The majority of attendees will be daytrippers, including all local residents. However, a share of attendees will stay overnight before, during, and/or after an event; in general, we assume that a small share of attendees to many event types will stay overnight. For most events, this share is assumed to be 15 percent or less. For less-frequent events such as festivals and surf events, the share of overnight attendees will be higher.

Not all overnight visitors will stay in hotels; many typically stay with friends and family and therefore do not pay for hotel rooms. We assume that 85 percent of overnighters will pay for hotel rooms.

For all overnight attendees in hotels, we assume an average of two people per hotel room. In addition, according to Virginia Beach Economic Development, the average tourist stay in the city ranges from more than 3.5 nights to nearly five nights, depending on the time of year. However, because most Event Center events will take place over one day, we assume a shorter average stay that is more consistent with the event length.

Out-of-Facility Spending Assumptions

Assumptions related to out-of-facility spending by event attendees is based on factors such as past studies of tourists' spending in Virginia Beach, adjusted for assumed spending characteristics of attendees of Event Center events.

Daily spending has been separated into four categories: food and beverage, retail and entertainment, lodging, and transportation and other. Overnight attendees are generally assumed to spend more than daytrippers, as they will spend more time in the city and have lodging expenditures. Our assumptions of spending by category is also consistent with the percent of spending by type as reported by VBED.

Estimates of daily spending apply to attendees of all event types, and assumed daily spending varies by category, and with the exception of lodging, applies to all daytrippers and overnight travelers (daytrippers, by definition, will not spend money on hotels).

The following table summarizes all assumptions related to attendee origin, type of traveler, daily spending, and other characteristics.







	Concerts - Indoor Reserved	Concerts - Indoor GA	Concerts - Outdoor	Concerts - Minor	Other Ticketed Sports/ Entertainment	Community Events	Private/Social Events	Festivals	Surf Park Events
Attendees' Geographic Origin									
From Virginia Beach (All Daytrippers)/Non-Event Center Tourists	60%	60%	60%	70%	60%	75%	55%	45%	40%
From Outside of Virginia Beach									
Daytrippers	35%	35%	25%	29%	38%	25%	35%	35%	20%
Stay Overnight	5%	5%	15%	1%	2%	0%	10%	20%	40%
Subtotal	40%	40%	40%	30%	40%	25%	45%	55%	60%
Out-of-Event Center Spending Assumptions									
Food and Beverage/Person/Day									
Daytrippers	\$10.00	\$10.00	\$10.00	\$10.00	\$10.00	\$2.50	\$2.50	\$10.00	\$10.00
Stay Overnight	\$20.00	\$20.00	\$20.00	\$20.00	\$20.00	\$5.00	\$5.00	\$20.00	\$20.00
Retail and Entertainment/Person/Day									
Daytrippers	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00
Stay Overnight	\$10.00	\$10.00	\$10.00	\$10.00	\$10.00	\$10.00	\$10.00	\$10.00	\$10.00
Transportation and Other/Person/Day									
Daytrippers	\$2.50	\$2.50	\$2.50	\$2.50	\$2.50	\$2.50	\$2.50	\$2.50	\$2.50
Stay Overnight	\$10.00	\$10.00	\$10.00	\$10.00	\$10.00	\$10.00	\$10.00	\$10.00	\$10.00
Lodging/Person/Day									
Daytrippers	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Stay Overnight	\$60.00	\$60.00	\$60.00	\$60.00	\$60.00	\$60.00	\$60.00	\$60.00	\$60.00
Hotel-Related Assumptions									
People per Room	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Nights per Visit	2.0	2.0	2.0	2.0	2.0	1.0	1.5	2.0	7.0
Location of Spending									
% of Overnight Visitors in Hotels	85%	85%	85%	85%	85%	85%	85%	85%	85%
Percent of Spending Captured in Virginia Beach	90%	90%	90%	90%	90%	90%	90%	90%	90%

Gross Direct Spending

Source: Stone Planning

Based on the assumptions described above, as well as the forecasts of facility events and attendance and facility revenues, the following table summarizes the total gross direct spending generated by the presence and operation of the Event Center. The first line (spending generated by the facility) has previously been described, and the spending captured throughout Virginia Beach by all event attendees is also summarized, based on the assumptions described above.

TOTAL DIRECT SPENDING - GROSS	
	Total
Gross Facility Revenue	\$17,182,000
Spending Outside the Facility	
Lodging	\$2,902,000
Food and Beverage	\$3,172,000
Retail and Entertainment	\$1,817,000
Transportation and Other	\$1,026,000
Total Spending Outside the Facility	\$8,917,000
Total Gross Direct Spending - Inside and Outside of the Facility	\$26,099,000
# of Room Nights	20,970
Source: Stone Planning	







Gross vs. Net Impacts

The total economic activity summarized above does not represent actual economic impacts; it merely shows the total spending generated by facility operations, including transfer spending by local residents. In this section, transfer spending is deducted from total spending to arrive at the estimated economic impacts to Virginia Beach. In other words, for the purposes of calculating economic impacts to the city, all spending by city residents and those in town for other purposes is subtracted.

Spending impacts to the city related to out-of-facility spending as well as spending on tickets, F&B and merchandise, and ticket fees are based on assumptions of attendee origin and their spending characteristics, as previously shown. However, other revenues captured by the facility itself are analyzed separately.

In general, 90 percent of facility revenues such as those from concert promotion, expense reimbursements, premium and season tickets, and a VIP club are considered to be net impacts to the city, as there may be slight overlap of opportunities between the Event Center and the VUHLA. However, because the VUHLA already has a naming partner and no other similar facility exists in the city, 100 percent of naming rights revenue is considered to be a net impact.

We have estimated the net economic impacts to Virginia Beach from the Event Center. In other words, we estimate the amount of spending that is captured within the city but originates outside of the city. The estimated net economic impacts are shown in the following table.

TOTAL DIRECT SPENDING - GROSS AND NET			
	Gross	Net to Virginia Beach	
In-Facility	\$17,182,000	\$7,463,000	
Outside the Facility Lodging Food and Beverage Retail and Entertainment Transportation and Other	\$2,902,000 \$3,172,000 \$1,817,000 \$1,026,000	\$2,902,000 \$1,253,000 \$690,000 \$451,000	
Total - Outside the Facility	\$8,917,000	\$5,296,000	
Total Direct Spending	\$26,099,000	\$12,759,000	
Room Nights	20,970	20,970	

Source: Stone Planning







Multiplier Effect and Indirect Spending

As the spending from the direct economic activity takes place in the city's economy, it will trigger other, indirect, levels of economic activity. For example, the operating businesses that are affected by facility use (including the facility itself and hotels and restaurants, retail stores, and others) will purchase various goods and services from local and regional vendors (e.g., utilities, inventory, supplies, labor, and the like). As this occurs, these workers and vendors receive income and, in turn, make purchases of goods and services themselves. Within each round, some spending occurs in the local economy and some flows outside of that economy (referred to as "leakage"). The total amount of spending that stays within the local economy includes both the first round ("direct") and all subsequent rounds of economic activity ("indirect").

These total impacts are estimated through the use of "multipliers" applied to the estimates of direct impacts. The multipliers, which are calculated by the federal government and are unique to each geographic area, are regarded as the most reliable and accurate measure of indirect spending that is available. Multipliers differ from area to area because of geography; proximity to other business centers and the size of an area will affect the length of time that direct spending is retained by an economy before fully leaking out. In addition, different sectors of an economy have unique multipliers, based on their own proximity to other industry-specific economies, vendors and suppliers, and the like.

For this analysis, we have utilized multipliers developed by IMPLAN for Virginia Beach. Various multipliers for different industries are used, as every type of spending that comprises the direct impacts ("Category") has a multiplier, based on a corresponding "Industry Sector." As the table below shows, the multipliers for various industries generally range from approximately 1.5 to 1.8. In other words, a multiplier of 1.5 indicates that total economic activity is estimated at 1.5 times the estimate of direct impacts; this includes the direct impacts (at 1.0) and the indirect impacts (at 0.5). Multipliers typically increase as the size of a geographic area increases, as it takes more time for later rounds of spending to leave a larger area (for example, Virginia compared to Virginia Beach).







Category	Industry Sector	Multipliers
Facility Revenues		
Gross Ticket Sales	Perf. Arts, Spectator Sports, Museums, Zoos, Parks, Related Activities	1.7745
Promoter Profit	Perf. Arts, Spectator Sports, Museums, Zoos, Parks, Related Activities	1.7745
Gross Food and Beverage Sales	Food Services and Drinking Places	1.6172
Gross Merchandise Sales	Retail Trade	1.6321
Naming Rights	Broadcasting/Telecommunications	1.5852
Other Advertising and Sponsorships	Broadcasting/Telecommunications	1.5852
Facility/Ticket Fees	Perf. Arts, Spectator Sports, Museums, Zoos, Parks, Related Activities	1.7745
Event Expense Reimbursement	Perf. Arts, Spectator Sports, Museums, Zoos, Parks, Related Activities	1.7745
Premium Seating (Premium Portion)	Perf. Arts, Spectator Sports, Museums, Zoos, Parks, Related Activities	1.7745
Season Tickets (Premium Portion)	Perf. Arts, Spectator Sports, Museums, Zoos, Parks, Related Activities	1.7745
VIP Club	Perf. Arts, Spectator Sports, Museums, Zoos, Parks, Related Activities	1.7745
Other	Perf. Arts, Spectator Sports, Museums, Zoos, Parks, Related Activities	1.7745
Spending Outside the Facility		
Food and Beverage	Food Services and Drinking Places	1.6172
Retail and Entertainment	Retail Trade; Perf. Arts, Spectator Sports, etc.	1.7033
Lodging	Accommodation	1.5642
Transportation and Other	Transit and Ground Passenger Trans.	1.6759

Source: US Department of Commerce, Stone Planning

Based on these multipliers, total (direct and indirect) net spending is summarized below.

TOTAL NET SPENDING - DIRECT AND INDIRECT		
	Net to Virginia Beach	
Total Net Direct Spending	\$12,759,000	
Net Indirect Spending		
In-Facility	\$2,290,000	
Outside of Facility		
Lodging	\$1,637,000	
Food and Beverage	\$773,000	
Retail and Entertainment	\$485,000	
Transportation and Other	\$305,000	
Total Indirect Spending	\$5,490,000	
Total Spending - Direct and Indirect	\$18,249,000	

Source: Stone Planning

As the table shows, including both direct and indirect spending, total spending impacts are estimated to be approximately \$18.2 million from the Event Center.







Jobs and Payroll

The operation of the Event Center creates jobs both within the facility and throughout the city. The facility's use and attendees' spending will also support jobs throughout the area, at hotels, restaurants, retail stores, and the like (from both direct and indirect spending). Employment and income impacts to Virginia Beach refer to jobs and income that are captured by residents only.

Average hourly and annual wage information for various types of occupations are provided by the US Department of Labor's Bureau of Labor Statistics, based on data compiled for the Virginia Beach metro area in 2017.

Similar to spending, multipliers are used to estimate indirect employment and earnings, based on the direct estimates. The following table summarizes employment and income multipliers used in the calculation of indirect jobs and earnings.

VIRGINIA BEACH MULTIPLIERS - EMPLOYMENT AND EARNINGS				
Category	Employment Multipliers	Earnings Multipliers		
Facility Operations	1.4408	1.7367		
Concessions, Food and Beverage	1.2552	1.5060		
Retail and Entertainment	1.5489	1.6284		
Lodging	1.3846	1.5696		
Transportation and Other	1.2288	1.5328		

Source: US Department of Commerce, Stone Planning

The table below shows the total (including direct and indirect) net jobs and payroll generated within Virginia Beach by the facility.







TOTAL JOBS AND EARNINGS	
	To Virginia Beach
EMPLOYMENT	
<u> Facility</u>	
Full-Time Equiv. Facility Operations Staff	13
Outside of the Facility	
Lodging	27
Food and Beverage	39
Retail and Entertainment	17
Transportation and Other	9
Total Jobs (Full-Time Equivalent)	105
EARNINGS	
Facility Operations - all FT and PT	\$987,000
Lodging	\$1,122,000
Food and Beverage	\$1,236,000
Retail and Entertainment	\$660,000
Transportation and Other	\$392,000
Total Earnings	\$4,398,000

Source: Stone Planning

As the table shows, the new facility is estimated to support an incremental 105 jobs and approximately \$4.4 million in wages.

FISCAL IMPACTS FROM OPERATIONS

As previously described, fiscal impacts represent new public-sector tax revenues that are generated based on the presence and use of the facility. The following table summarizes applicable taxes and the spending that they apply to and their rates. We assume that tax rates will remain unchanged in the future.

This fiscal impact analysis includes new sales, lodging, meals, and admission taxes at the city level. These taxes and their rates are summarized below.







LOCAL TAXES AND RATES	
	City Tax Rate
Sales Tax	1.0%
Meals Tax	
Meals Tax Component	5.5%
Sales Tax Component	1.0%
Lodging Tax	
Lodging Tax Component	8.0%
Sales Tax Component	1.0%
Admission Tax	10.0%
Source: Stone Planning	

The new tax revenues attributable to the facility are summarized in the following table. We show the taxes generated by both the gross direct spending (which includes local residents) as well as by the net spending (which only includes visitors who are in Virginia Beach because of the facility).

LOCAL FISCAL IMPACTS		
	Gross	Net
Sales Tax	\$122,000	\$65,353
Meals Tax	\$365,569	\$143,259
Lodging Tax	\$232,152	\$232,152
Admission Tax	\$1,014,150	\$403,740
TOTAL	\$1,733,871	\$844,504

Source: Stone Planning

ECONOMIC AND FISCAL IMPACTS FROM CONSTRUCTION

The assumed cost of the Event Center is \$35 million. Based on local construction-related multipliers and the share of materials and services to be sourced locally, the following table summarizes the estimated economic and fiscal impacts from the construction project.





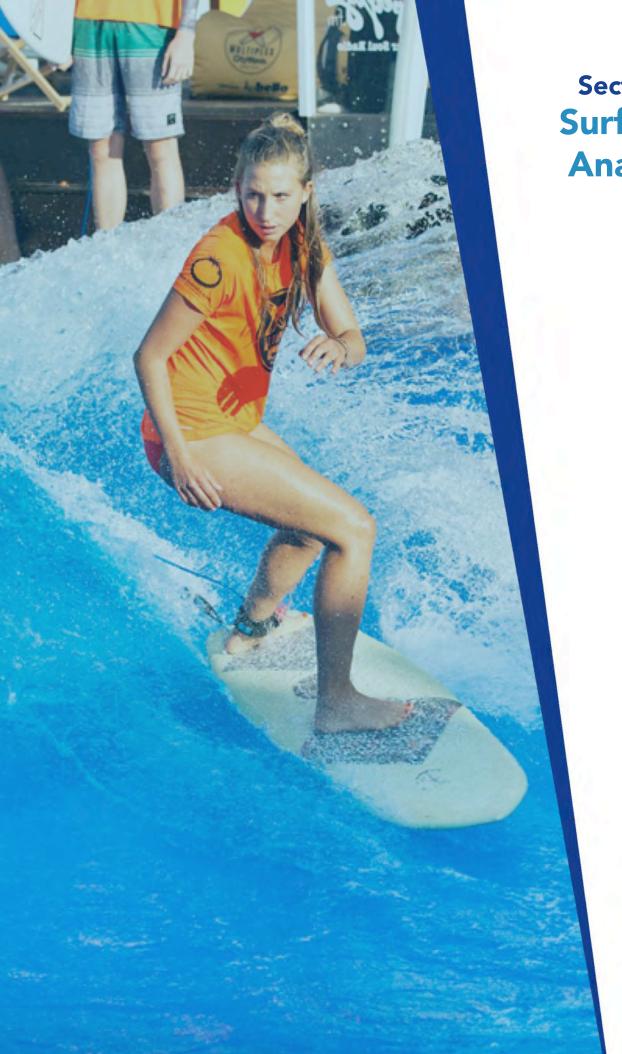


CONSTRUCTION IMPACTS (\$000s)	
Economic Impacts	
Sales of Materials	\$7,947
Total Employment	314
Total Labor Income	\$18,255
Fiscal Impacts	
BPOL	\$133
City Sales Tax	\$23
Meals Tax	\$44
Lodging Tax	\$1

Source: City of Virginia Beach, Stone Planning

Approximately \$8 million is estimated to be paid to local firms, and the total impacts (including direct and indirect) to local workers are approximately 315 jobs and \$18.3 million in wages.

Fiscal impacts to the city are estimated to be a total of approximately \$200,000.



Section 8
Surf Park
Analysis







This section addresses, at a high level, the potential operations of the surf park and our review of limited components of Wavegarden estimates provided to the consulting team.

We have reviewed Section 5 of the economic feasibility study compiled by Wavegarden and its methodology and usage estimates, although we have not been provided other sections of its study. As surf parks are relatively new offerings and limited data on their operations is available, we have compared Wavegarden's methodology and estimates to those used for similar attractions. We provide the following observations:

- o Wavegarden's "top-down" and "bottom-up" methodologies are appropriate and sound,
- o Its "top-down" penetration rates appear to be conservative.
 - o Resident rates: Wavegarden assumes penetration rates ranging from 0.3 percent to three percent for watersports enthusiasts (depending on distance) and 0.1 percent to 1.5 percent for others. For a specialty or mid-tier attraction, overall penetration rates for regional residents can easily exceed three percent.
 - o Tourist rates: Wavegarden assumes penetration rates ranging from 0.5 percent to 1.25 percent, depending on time of year. For a specialty or mid-tier attraction, these rates are likely three percent or less.

These rates do not include tourism that would be induced to Virginia Beach specifically because of the surf park, and are therefore potentially conservative.

- o The maximum daily usage estimates appear reasonable, compared to reported capacity of NLand in Austin and adjusting for the size of the surf parks.
- o Its overall usage estimates and assumptions appear to be reasonable.

From discussions with other industry professionals, we have gathered the following information:

- o Wavegarden's forecasts are thought to be particularly conservative and can be significantly exceeded.
- o Virginia Beach is a great location for a surf park.
- o In general, people will be willing to surf in a wetsuit (for year-round surfing).
- o In addition to Virginia Beach's tourists (who are included in Wavegarden's estimates), surfers will travel to Virginia Beach specifically to surf at the park (because of both the technology/availability of the park and the location).
- o The park can attract events, competitions, and training (for example, the World Surf League now hosts one of its nine events at a surf park, and the park could allow surfers to significantly







increase the number of waves they ride per year).

- o The underlying technology, and the resulting wave, is crucially important, and Wavegarden has the best technology.
- o "Inland" surfing could be at the beginning of a significant increase in popularity (similar to MMA sports in recent years).
- o Should the concept of surf parks become more popular, the addition of facilities in other markets could reduce the uniqueness and popularity of a facility in Virginia Beach.





RETAIL POTENTIAL AND MERCHANDISING STUDY

PREPARED FOR:



AND



PREPARED BY:



NICK A. EGELANIAN August 1, 2018

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EXHIBITS:

- A. Hampton Roads MSA Specialty Retail Map and Trade Area and Demographics
- B. City of Virginia Beach Map and Demographics

PART ONE

EXECUTIVE SUMMARY 1

A. Assignment

SiteWorks has been retained by **Venture Realty Group** to provide an analysis of the full retail potential and merchandising recommendations for the proposed **Wave** mixed-use development planned to be opened in Virginia Beach, Virginia.

B. Analytical Framework

We distinguish **Commodity** retail uses and shopping facilities from **Specialty** retail uses and shopping venues as an underlying premise in our analyses and recommendations. In doing so, our objective is to provide highly targeted merchandising recommendations with an eye toward maximizing asset positioning within one or both of these broad retailing categories, as applicable.

C. The Wave Mixed-Use Development

The **Wave** mixed-use project is designed to include four distinct "blocks" at the epicenter of the **Entertainment District**, on the **Dome Site**. The **Project** is designed to provide a pedestrian friendly experience bringing year-round activity to the corridor running from the **Virginia Beach Boardwalk** to the **Convention Center**. The **Project** is conceived to capture the "energy, spirit, imagination and potential of **Virginia Beach** and its people," according to Pharrell Williams, the acclaimed **Virginia Beach** rapper, singer, songwriter and record producer who will also be a partner in the **Project**.





The focal point of the **Wave** will be one of the largest wave parks in the world consisting of a 200,000 square foot **Surf Park** and lounge area designed by San Sebastian, Spain-based **Wave Garden**, designer of successful surfing parks operating in the U.K. and the United States with over a dozen more in development around the world.

Wave Garden, an engineering company focused on the research, design, manufacturing, installation and operation of world-class wave generating systems and surfing lagoons, is partnering with **Venture** to provide the man-made wave technology that is expected to bring 1,000 perfect waves an hour to the heart of the **Wave** as its core attraction. The **Surf Park** is being designed to include the ability to modify

¹ Defined terms used in the **Executive Summary** are used as defined in the **Full Report** contained in **Part Two** hereof.

wave height up to six feet in the pool itself. Construction of the **Project** is anticipated to begin as early as spring of 2019, and the first phase of the **Project** is expected to open in 2020 or 2021.

The **Project**, designed to create distinct neighborhood blocks with individual personalities and merchandising focuses, is currently planned (subject to change) as follows:



The **Project** will be strategically located immediately adjacent to the center of the **Oceanfront District**, in perhaps the single most prominent location within the **Virginia Beach Resort Area**. The **Property**, located between 18th Street to the south, 20th Street to the north, Baltic Avenue to the west and Atlantic Avenue to the east, is in the geographic center of the **Resort Area**, is also centrally located in the **Entertainment District** and adjacent to the **Vibe District** and will be easily accessible from the eastern termini of both Interstate 264 and U.S. Route 58 (Virginia Beach Boulevard), the two most important gateway highways for vehicular traffic entering the **Resort Area**.

D. Market Fundamentals

The **Virginia Beach Resort Area** is located within, and be significantly influenced by, the larger **Hampton Roads Region**, part of the Atlantic coastal plain comprised of southeast Virginia, northeastern North Carolina and portions of Maryland located as part of the larger Atlantic coast and Chesapeake Bay ecosystems. The **Hampton Roads Region** includes the Virginia Beach-Norfolk-Newport News, VA-NC, Metropolitan Statistical Area, consisting of sixteen county-level jurisdictions within five counties and nine independent cities in Virginia (and two counties in northeastern North Carolina), including the cites of Norfolk, Virginia Beach, Chesapeake, Portsmouth, Newport News, Hampton and Suffolk.

The **Hampton Roads Region** covers 3,132.6 square miles and includes approximately 1,674,801 full time residents with a median age of 37.1 years. The region includes approximately 659,266 households and ranks 37thin size (out of 382 MSAs nationwide) among all Metropolitan Statistical Areas in the United States. Approximately 31.4% of **Hampton Roads Region** residents over 25 years in age have earned a bachelor's degree or higher.





The Hampton Roads Regional economy has become increasingly dependent upon defense spending over the past decade with Department of Defense spending accounting for 45.6% of all regional economic activity.

The military currently has 64 ships homeported in the area and 36 aircraft squadrons. They also have a variety of Navy Special Forces and support units in the market.

The Virginia Tourism Corporation reported approximately 15.2 million visitors traveled to **Virginia Beach** in 2016 for leisure or business travel which was a 9.4% increase over 2015. Visitation is estimated to have reached approximately 17.0 million in 2017. Approximately 8.1 million of these visitors came to the **City** for only one day, while 7.1 million stayed for one or more nights. While travelers come to the market from across the country and around the globe, nearly 75% of visitors arrived by car and a reported 43 percent come to visit relatives.

While exact statistics on visitation to the **Virginia Beach Resort Area** are difficult to ascertain, our review of the Longwood international's Virginia Beach 2016 visitor Research Report as well the BCF Virginia Beach Perception Study (Wave 2), dated October 28, 2016 indicates that trips to the market are heavily weighted to prime Summer Beach months and the vast majority of these trips originating from Mid-Atlantic markets, including Washington, DC, Richmond, VA and New York, NY and 31% of visitors staying in **Resort Area** hotels. As a result, we estimate that approximately 50% of visitors coming to the market, or in excess of 7.5 million visitors annually have at least some contact with the **Resort Area**. The tourism industry is the fifth largest private employer in Virginia supporting more than 229,000 jobs and \$5.6 billion in salaries.

E. Competitive Landscape

The **Hampton Roads Region** and **Virginia Beach** are fully supplied with adequate supplies of both **Commodity** and **Specialty Retail**, however the **Virginia Beach Resort Area** is populated primarily with traditional "beach offerings including t-shits shops and seasonal merchandise offerings and lacks major attractions other than the beach itself and the **Boardwalk**. We believe that the we believe the **Wave** is well-positioned to fill large gaps in the market and is well positioned for success

F. The Surfing Industry



35 million surfers participate in the sport worldwide, with 3.3 million surfers residing in the United States. 49% of surfing expenditures, however, are reported to take place in the United States. The surfing industry is growing at between 12 and 15 percent annually, with total surfing industry revenue reaching an estimated \$13.2 billion in 2017, \$1.6 billion from surf footwear sales alone. (By comparison, estimated annual revenue in the golfing industry is estimated to have reached just under \$35 billion in 2017.)

Youth participation in surfing increased by 73% from 2006 to 2016, making it one of the fastest growing sports in the country. We expect the surfing industry to grow disproportionately relative to most other sports in the coming decade as it becomes an Olympic sport in 2020 and benefits from steadily increasing exposure.

G. Trade Area Analysis

The trade area for the **Project** includes the entire **Hampton Roads Region**, the substantial existing **Virginia Beach** tourism market, and the larger East Coast population center where 38% of the U.S. population resides.

H. Retail Potential

While calculation of "spending potential" (or so-called "gap analysis") was historically used to substantiate the addition of new retail square footage to an existing market and to establish sales potential, we do not believe that such an analysis would yield meaningful results in this case, given the unconventional centerpiece of the **Project's** main **Surf Park** attraction and the lack similar retail projects available for comparison.

We do, however, believe that the **Resort Area**, while adequately served today with standard beach related retail and services, has little in the way of destination attractions and, with the exception of a small supply of quality restaurants, does not currently offer a mixed-use retail destination featuring the kind and quality of entertainment and retail components planned for the **Wave**.

With this in mind, we feel highly confident that the **Project**, with its central location in the **Resort Area** and unique first to market attractions, performance space, office and residential components, will not only support the creation of the 138,100 combined sf of retail and restaurant space (along with the more than 100,000 sf of entertainment and attraction space,) but is likely to create demand for additional square footage in the near-term future.

I. Displacement Analysis

We were asked to participate, along with Lambert Advisory ("Lambert"), in an analysis of retail and restaurant capacity (the "Lambert Analysis") in the Resort Area, based upon completion of the Project, as described herein, along with all three additional projects planned for the Resort Area, as described in Section VI above.



While we engaged in extensive discussions with **Lambert**, **Lambert Analysis**") was completed independently by **Lambert**.

Lambert estimates that current restaurant supply in the primary **Resort Area** totals approximately 500,000 sf at present, consisting primarily of full service restaurants, but also including fast casual, fast food and take out establishments. We estimate that a total of approximately 98,000 sf of new restaurant space is currently being planned for the four **Proposed Projects**, or approximately 20% of existing restaurant supply in the **Resort Area**.

We have not evaluated total retail supply, average rents, vacancy rates or other retail supply data for the **Resort Area** and have not relied on such information in reaching our conclusions for the **Wave.**

We concur with **Lambert's** overall conclusion that, based upon the assumptions set forth in the **Lambert Analysis**, the additional retail, restaurant and entertainment capacity planned in the four **Proposed Projects**,

will not result in an oversupply of in the **Base Year** of operation of the **four PROPO Projects**, and in fact, would likely stimulate demand for additional supply.

Given the overall importance of the **Wave Project** as tone of the single greatest net generators of new visits to the **Resort Area** among the **Proposed Projects**, and critical need for strong restaurant performance for the overall success of the **Wave**, we believe that the introduction of prime restaurant space associated with competing projects, particularly the **Fishing Pier**, a low impact net visit generator, should ideally be staggered to limit the risk of too much new restaurant supply being added to the market at any given time.

In addition, we believe that the following additional factors should be considered in interpreting the overall impact of the introduction of new restaurant space:

- **1. Normal Attrition.** Absent the introduction of new restaurant supply associated with the four **Proposed Projects**, normal attrition of existing restaurant supply would be expected to occur in the market, reducing current supply and requiring replacement.
- 2. Incremental Market Growth. Independent of the impact from the four Proposed Projects, Resort Area visitation and demand would be expected to continue to grow annually. In the even hat annual growth occurs at a modest 3.5% annually, for example, demand for additional retail and restaurant space would grow by 17,500 sf annually, reducing the impact of any possible short-term oversupply.

J. Merchandising Recommendations

Given the dimensions of the **Wave Property** itself as well as the large footprint of the **Surf Park**, the site plan for the **Wave** does not follow traditional shopping center or mixed-use design or planning principles. In addition, more than half of the **Wave's** retail square footage is located on the second floor, requiring addition planning attention. Despite these planning challenges, however, we believe that the **Project's** unique and compelling attractions and entertainment anchors, along with its central **Resort Area** location, provide an exceptional retail opportunity.

In addition to the **Surf Park**, **Venture** is working with animation genius Josh Wexler to develop an approximately 15,000 sf experiential virtual reality concept planned to be located on the second floor of the northeast corner **North Building**. While details of the new concept are not available as of the date of this report, we believe that this concept, when designed has the potential to become a destination unto itself and offers the **Project** another opportunity to diversify its overall appeal and help link the **Project** to the **Vibe District**.

The primary focus of the **Project** will be on the **Surf Park** itself along with the rows of retail stores and restaurants located to the north of the pool on the ground and second floors of the **North Building**. The **Surf Park** is expected to be the single largest attraction drawing visitors to the **Wave**. **Wave Garden** estimates that the **Surf Park** will attract 97,867 paying customers annually from a potential market area estimated at over 8.3 million residents. With the annual capacity of the **Surf Park** estimated at 272,000 "rides", the pool will be capable of drawing a multiple of its estimated draw at maximum utilization.

We recommend that the **North West Block** function as a bridge to both the **Vibe District** and **the Convention Center** to the west and to the heart of the **Project** to the east. As part of this mix, we believe that a high-end specialty grocery store would be a unique and effective addition to the **Project** and the **Resort Area**. We recommend, however, that **Venture** consider a smaller scale grocery store in the range of approximately 15,000 feet in size.

The second floor 35,000 sf National Geographic Experience Attraction and 45,000 sf "plush recline" **Cinepolis** or similar theater will provide strong additional destination appeal to the **Project**, however, we recommend that **Venture** consider creating adding first-floor entrances and prominent marques for these

attractions in order to enhance overall **Project** appeal and introduce a sense of excitement and connectivity at the ground floor level of the **Project**.

In addition, given the difficulty of bringing pedestrian traffic to second floor retail locations in general, we recommend that additional second-floor retail merchandising be limited to destination entertainment and attractions and larger format signature restaurants.

We recommend that **Venture** merchandise a combination of food and beverage concepts and core surfing and related merchandise in the ground floor space in the **North Building**.







We recommend that contemporary restaurant and social clubs, like Pine wood Social and King's Bowling be considered to occupy key second story retail space, while a collection of favorite coffee houses, cafes, ice cream and treat shops and authentic surf apparel, equipment and repair shops fill out the ground floor merchandising plan.

PART TWO

FULL ANALYSIS AND REPORT

SECTION I

Description of Assignment

This report (the "Report" or the "Study") has been prepared by SiteWorks Retail Real Estate Services, LLC ("SiteWorks") for Venture Waves, LLC ("Venture" or the "Developer") and The Virginia Beach Development Authority (the "VBDA") to evaluate the retail potential of the proposed redevelopment of the site known as the "Dome Site" (referred to herein as the "Dome Site" or the "Property") located in the "Oceanfront District" of the City of Virginia Beach, VA ("the Market" or "Virginia Beach") in the eastern portion of the Hampton Roads, VA Metropolitan Statistical Area (the "Hampton Roads Region" or the "Hampton Roads").



Former "Dome Site" Music Venue

The development plan for the **Property** currently calls for **Venture** to develop a mixed-use entertainment venue to be known as "The Wave" (referred to herein as the "**Wave**" or the "**Project**") featuring the East Coast's largest man-made Surf Park designed to generate year-round surfing capable waves and related activities.



Proposed "Wave" Rendering (Subject to Change)

Venture and **VBDA** have retained **SiteWorks** to conduct a comprehensive analysis of the market and proposed merchandising plan for the **Wave**, which will include the following:

- Assessment of the market and trade area for the **Project**;
- Analysis of competition in the market;
- Review of the proposed **Project** configuration;
- Assessment of the conceptual merchandising plan for the **Project**;
- Place-making considerations; and
- Discussion Retail demand and of the Lambert Advisory Analysis







Virginia Beach, Virginia Oceanfront District Highlight

SECTION II

Analytical

Framework and Methodology

A. Analytical Framework

We distinguish "Commodity" retail uses and shopping facilities from "Specialty" retail uses and shopping venues as an underlying premise in our analyses and recommendations. In doing so, our objective is to provide highly targeted merchandising recommendations with an eye toward maximizing asset positioning within one or both of these broad retailing categories, as applicable. To this end, we will frequently refer to, and differentiate between, Commodity retail and Specialty retail (each as defined below) throughout our analysis and in this Report.

B. Guiding Principles

Well-conceived **Commodity** retail is designed primarily to offer efficiency, convenience, and functionality, while successful **Specialty** retail shopping venues are designed to inspire extended stays and discretionary spending by establishing emotional bonds with customers.



The Commodity vs Specialty Retail Dichotomy

Due to these fundamental differences, we generally recommend merchandising **Commodity** retail and **Specialty** retail separately in merchandising plans, with only carefully considered exceptions.

C. Definitions

The following terms are defined, used, and applied throughout our **Report** as follows:

1. Commodity Retail

Commodity retail goods and services are defined as those goods and services purchased and consumed on a regular basis using primary household funds. Consumers most often purchase **Commodity** retail goods and services at retail outlets offering the combination of low price and convenience best suited to the need and purchase in question.

Commodity retailers range from local convenience stores and drug stores to grocery, big box, and general merchandise stores and warehouse clubs. Successful **Commodity** retail shopping facilities are designed and constructed to offer consumers efficiency, functionality, cost effectiveness and convenient parking.







Commodity Retailers

While involving the establishment of trust by the consumer, the selection of **Commodity** retailers and shopping centers that are preferred by consumers generally does not require the delivery of a shopping "experience" or the development of an emotional attachment to the place of purchase by the consumer.

2. Specialty Retail

By contrast, **Specialty** retail goods and services are defined as discretionary or aspirational goods and services purchased using the consumer's discretionary funds (and discretionary time). As such, consumers most often purchase **Specialty** retail goods and services at retail outlets offering the best aspirational product assortment in the most appealing shopping environment.





Specialty Retailers and Shopping Centers

Consumers develop preferences for **Specialty** retailers and shopping centers based primarily upon positive emotional responses to their shopping experiences. **Specialty** retail also includes all forms of entertainment competing for consumer discretionary dollars, including theme parks, sports venues, casinos and cultural centers.

D. Methodology

Prior to preparing this **Report**, **SiteWorks** conducted independent fieldwork during the month of March, 2018, including visiting the **Property** itself and retail facilities in and around **Virginia Beach** and the **Hampton Roads** market.

We also visited and reviewed areas throughout the **Hampton Roads** market that we believe may directly or indirectly influence the retail potential of the **Wave** and completed extensive reviews of residential neighborhoods and commercial zones throughout the region.



Propose WAVE Development (Subject to Change)

During our field visits, we conducted numerous interviews with a variety of knowledgeable individuals, including retail store managers, real estate professionals, and selected consumers from a variety of ethnic and socio-economic backgrounds. In addition, we have extensively discussed the **Project** with executives and have reviewed several various study results to date for the **Property.**

SECTION III

Resort Area Districts

A. Introduction

After almost 25 years and considerable public discussion since its demolition in 1994, the **VBDA** issued an RFQ in January 2017 requesting proposals from qualified development companies to transform the parking lot and surrounding underused buildings that today constitute the **Dome Site** into a world class mixed-use development, including destination entertainment and attractions, a mix of hotel and residential uses, and complimentary retail restaurants and shops.

Venture was selected to redevelop the **Property**, based upon its plan to develop the **Project**, an ambitious year-round wave park destination designed to appeal to a wide range of audiences from local residents and tourists to the large and growing surfing community. The proposed \$300 Million **Wave** mixed-use development has been planned on the approximately ten-acre **Dome Site** located in the heart of the **Virginia Beach** Entertainment District (the "**Entertainment District**"), adjacent to the emerging "ViBe Creative District" (the "**Vibe District**") and bordering on the centrally located **Virginia Beach** Oceanfront District (the "**Oceanfront District**").

The **Oceanfront District**, **Entertainment District**, and **Vibe District** are described in more detail below and collectively referred to herein as the "**Resort Area**".

B. The Oceanfront District

The **Virginia Beach Oceanfront District**, located in the southeastern most quadrant of the **City**, represents the primary Atlantic Ocean beachfront resort area in **Virginia Beach**.



Virginia Beach Oceanfront District

The district includes the three-mile long **Virginia Beach** oceanfront boardwalk (the "**Boardwalk**"), along with the primary beach related traffic corridors running north-south along Atlantic and Pacific Avenues. The district includes over 40 beachfront hotels and resorts.

C. The Entertainment District

The **City of Virginia Beach**, having studied the best ways to enhance the desirability of the **City** as a tourist destination and to leverage the assets of the **City** to maximize tax revenue, concluded it would benefit from the creation of the new **Entertainment District** extending west from the **Oceanfront District** through the **Dome Site** to the Virginia Beach Convention Center (the "**Convention Center**") and adjacent

parcel in order to fulfill the desires of residents and visitors alike for additional entertainment options and to assist in bringing life to the area during off season months.









Redevelopment of the **Dome Site** into a vibrant year-round mixed-use entertainment venue stands at the center of this initiative, which also includes the creation of a large sports and recreation facility adjacent to the **Convention Center**.



Proposed Virginia Beach Entertainment District

The **Project** (as described in more detail **in Section IV** below) is envisioned to become the centerpiece of the **Entertainment District** and a primary connecting point between the **Boardwalk** to the east and the **Convention Center** to the west along 18th, 19th and 20th Streets.

D. The ViBe Creative District

The **Vibe District**, located to the southwest of the **Dome Site**, was developed to create a "hub for artists and spirits, roasters and restaurants, workouts and wares, museums and more", according to the district's web site. The purpose of the district is to create a dedicated area where "creative businesses can set up



The ViBe Creative District

discovery in locals and visitors alike." The district is programmed to offer something "always going on", with a diverse calendar of daily, weekly and monthly events from farmer's markets to entertainment event.

SECTION IV

The Wave Mixed-Use Development

A. Dome Site History

The **Dome Site** first became a **Virginia Beach Resort Area** entertainment destination with the construction of the "Dome" in 1958 (the **Dome**"). At the time of the **Dome's** completion, it represented one of the first geodesic domes built in the United States and became an instant landmark. The **Dome**, with its 1,000-seat concert venue, quickly rose in stature to become perhaps the most important signature destination in the **Resort Area**, attracting countless music legends, including The Supremes, The Rolling Stones, Fleetwood Mac, Jimi Hendricks and Stevie Wonder.





The Dome Events Center

In addition to providing live entertainment during the prime summer tourist season, the **Dome** remained open in the off season, offering a wide variety of attractions including roller skating, surfing movies, trade shows and annual flower sales, among others. By 1994, however, the **Dome** had lost its prior luster and relevance and was demolished and replaced with a surface parking lot.

B. Project Description

The **Wave** mixed-use project is designed to include four distinct "blocks" at the epicenter of the **Entertainment District**, providing a pedestrian friendly experience bringing year-round activity to the corridor running from the **Virginia Beach Boardwalk** to the **Convention Center**. The **Project** is conceived to capture the "energy, spirit, imagination and potential of **Virginia Beach** and its people," according to Pharrell Williams, the acclaimed **Virginia Beach** rapper, singer, songwriter and record producer who will also be a partner in the **Project**.





The Wave Development Site and Conceptual Plan (Subject to Change)

As part of the plan for the **Project**, the **City of Virginia Beach** plans to close 19th Street between Arctic and Pacific Avenues east of the **Project** in the primary corridor connecting the **Convention Center** and the **Boardwalk** today. The portion of 19th Street to be closed will be replaced by a new pedestrian connection between the **Convention Center** and the **Boardwalk** that will run directly through the **Project**. 18th and 20th Streets, each with direct **Boardwalk** access will likely become key **Boardwalk** access points.

The focal point of the **Wave** will be one of the largest wave parks in the world consisting of a 200,000 square foot surf pool (the "**Surf Park**") and lounge area designed by San Sebastian, Spain-based Wave Garden ("**Wave Garden**"), designer of successful surfing parks operating in the U.K. and the United States, with over a dozen more in development around the world.



Wave Garden Surf Park

Wave Garden, an engineering company focused on the research, design, manufacturing, installation and operation of world-class wave generating systems and surfing lagoons, is partnering with **Venture** to provide the man-made wave technology that is expected to bring 1,000 perfect waves an hour to the heart of the **Wave** as its core attraction. The **Surf Park** is being designed to include the ability to modify wave height up to six feet in the pool itself. Construction of the **Project** is anticipated to begin as early as spring of 2019, and the first phase of the **Project** is expected to open in 2020 or 2021.

C. Project Design and Configuration

The **Project** is designed to create distinct neighborhood blocks with individual personalities and merchandising focuses, as follows:



Proposed Site Plan (Created by Hanbury dated April 4, 2018 and Subject to Change)

1. The North West Block: The "**North West Block**", bound by 20th Street to the north, 19th Street to the south, Baltic Avenue to the west and Arctic Avenue to the east, is proposed to include 174 residential apartment units with 145 surface parking spaces plus an addition 520-space parking garage in a mixed-use building (the "**North West Building**"). The **North West Building** will be connected to the **North Building (as defined below)** by a second-floor pedestrian bridge.

The ground floor of the building is designed to accommodate a 30,500-sf grocery store, along with additional 44,400 square feet of ground floor retail. In addition, the building is planned to include a 45,000-sf cinema and a proposed 35,000 sf National Geographic attraction on the second floor.

2. The North (Wave Park) Block: The "North Block", bound by 20th Street to the north, 19th Street to the south, Arctic Avenue to the west and Pacific Avenue to the east, is proposed to include approximately 252 residential apartment units with a 520-space parking garage (the "North Building"). The North Building will be connected to the North West Building by a second-floor pedestrian bridge.

The **North Building** is designed to include approximately 39,900 sf of ground floor retail space just north of the **Wave Park** in addition to approximately 42,300 sf of second floor retail space. Additional surface parking spaces will be located off 20th Street adjacent to the ground floor retail.

- **3. The Church Block**: The "**Church Block**", bound by 20th Street to the north, 19th Street to the south, Pacific Avenue to the west and Atlantic Avenue to the east, is currently designed to feature a contemporary 150,000 sf office tower and approximately 6,800 sf of ground floor retail space (the "**Church Building**").
- **4. The South Block:** The "**South Block**", a partial block located at the southeast corner of 19th Street and Arctic Avenue, will become the location of a 3,500-seat live entertainment venue (the "**ViBe Theater**"), including a rooftop bar and private events facility.

D. Location, Access and Visibility

The **Project** will be strategically located on **Dome Site**, immediately adjacent to the center of the **Oceanfront District**, in perhaps the single most prominent location within the **Virginia Beach Resort Area**. The **Property**, located between 18th Street to the south, 20th Street to the north, Baltic Avenue to the west and Atlantic Avenue to the east, is in the geographic center of the **Resort Area**, is also centrally located in the **Entertainment District** and adjacent to the **Vibe District**.



Aerial View of The Dome Site Looking West to East

The **Project** will be highly visible from Pacific Avenue, one of the primary north-south traffic carriers through the **Resort Area** and will be conveniently located just one block from the Atlantic Ocean, near the eastern terminus of both Interstate 264 and U.S. Route 58 (Virginia Beach Boulevard), the two most important gateway highways carrying beach bound vehicular traffic entering the **Virginia Beach Resort Area**.

E. Regional Access

The **Project** will be easily accessible from local area streets and will be conveniently located just one block from the Atlantic Ocean near the eastern termini of both Interstate 264 and U.S. Route 58 (Virginia Beach Boulevard), the two most important gateway highways for vehicular traffic entering the **Resort Area**.



The Wave Central Location

The majority of traffic entering the **Resort Area** arrives via Interstate 264 which enters the **Resort Area** the via 21st Street at Parks Avenue adjacent to the **Convention Center** and Virginia Beach Boulevard (17th Street) to the south. Traffic also enters the **Resort Area** via Laskin Road to the north.

Interstate 264 runs from the City of Chesapeake to coastal **Virginia Beach** through the **Hampton Roads** and acts as the major feeder highway providing the final vehicular link for visitors coming to the **Resort Area** from local **Hampton Roads Region** markets, **Norfolk International Airport** and from major metropolitan areas to the north, south and west, including Richmond, VA, Washington DC, Baltimore, MD and markets beyond.

Section V

Additional Proposed Projects

A. Introduction

As outlined in the March 2018 Central Beach Entertainment District Resort Advisory Committee Briefing (the "Resort Area Strategic Plan"), the City of Virginia Beach and the VBDA are embarking upon a Resort Area economic development plan focused on four primary development initiatives, including



Virginia Beach Resort Area Initiatives

the proposed **Project** described in **Section IV** above, and three additional development projects in the **Resort Area.** (collectively the "**Proposed Projects**"). These three additional projects are described below.

B. Virginia Beach Fishing Pier



Virginia Beach Fishing Pier

Virginia Beach is currently evaluating proposals to either redevelop the 14th/15th Street Fishing Pier or to construct a new fishing pier at a new **Boardwalk** and 17th Street location (individually and collectively the "**Fishing Pier**" or the "**Fishing Pier Project**"). The **Fishing Pier Project** is expected to include construction of a new 880 feet long pier designed to accommodate fishing and pedestrian uses as well as to accommodate a new "giant wheel" attraction.







Existing and Proposed Fishing Pier Images

The **Fishing Pier Project** is expected to include at least two new restaurants and other retail amenities. In addition to modernizing and enhancing the fishing pier itself, and adding retail and restaurant space, plans call for the addition of two new hotels adding hundreds of hotel rooms to the market. The **Fishing Pier Project** itself, exclusive of separate hotel development activities, is expected to cost approximately \$25 million and will be privately owned and operated. The most recent bids for the project were due on Monday, May 14, 2018 and are in process of being reviewed by the **City of Virginia Beach**.

Despite other benefits that may be derived from this project, we believe that the **Fishing Pier Project** will generate little if any net new demand for retail and restaurant space in the **Resort Area**.

C. Sports Center

In November 2017, the **City of Virginia Beach** terminated the agreement to build an approximately 500,000 square foot entertainment and sports arena on **City**-owned property across 19th Street from the **Convention Center**. The proposed arena project was replaced by a more modest proposal to develop a





Proposed Sports Center

new "sports center" (the "**Sports Center**") featuring a new indoor fieldhouse capable of attracting an increased level of traveling sports events to **Virginia Beach**. The proposed **Sports Center** would be built on the west end of the **Convention Center** and could open by winter of 2020.

Visitors to **Virginia Beach** to attend sports events booked more than 100,000 hotel rooms in the **City** in 2017, and reports indicate that that number could jump 20 percent with a new facility that could be used for basketball, volleyball, cheerleading, dance and wrestling, according to a recent study commissioned by the **City**.

The new indoor **Sports Center** would likely feature a specialized running rack aimed at attracting the lucrative National Collegiate Athletic Association indoor track and field championships to the facility in offseason months. To attract the track and field market, the **City's** investment in the project would reportedly grow from \$40 million to \$55 million.



The **Sports Center** could also be enlarged to accommodate the addition of up to 10 additional basketball courts that could be laid on top of the track. "The courts and the track are our recipe for success," a **City** spokesman said. While the **City** currently hosts 17 events annually that could use the new facility, the addition of the new hydraulic track and basketball courts could draw up to 43 new events and retain existing events, more than doubling room nights from sporting events in **Virginia Beach**.

In addition to attracting new bookings, the new **Sports Center** is also expected allow the **City** attract lucrative sports marketing money. The new Center would be designed to attract weekend events and teams from outside the region that are currently unable to book in **Virginia Beach** today due to inadequate facilities. The facility, however, is expected to be utilized extensively by local residents on weekdays and on otherwise unused weekends.

In May, 2017, the **City** of Virginia Beach set aside the first \$4 million of the \$40 million projected construction cost. The **City's** total investment of approximately \$68 million will be offset by public facility revenue bonds, along with taxes generated on restaurant meals, hotel rooms and amusements. The final plan, including the 285,000 sf facility (with courts, a new track and 1,100 new surface parking spaces) was approved by the City Council on July 10, 2018.

The **Lambert Report** (as defined in **Section X** below) estimates that the **Sports Center**, will generate demand for an additional 51,800 square feet of new retail and entertainment space and 25,300 square feet of new restaurant space in the **Resort Area**. The **Sports Center** is not expected to create a meaningful supply of new retail or restaurant space itself, however.

D. Cavalier Hotel Redevelopment

The landmark Cavalier Hotel was built in 1927, however, the hotel has lost its luster in recent years, and after a succession of financial and legal maneuvers, **Virginia Beach** hospitality company, Gold Key/PHR, agreed to purchase the property and worked with the **City** to create a master development plan that would provide for the preservation of the original "Cavalier Hotel and historic landscaping elements while adding residences and a new Marriott hotel (the "**Cavalier Project**"). The **Cavalier Project** is now well under way and includes three parcels located south of 42nd Street near the intersection of Atlantic and Pacific Avenues in the **Resort Area**.





Cavalier Project Site and Marketing Images

After four years and \$81 million in renovations, the historic **Cavalier** hotel reopened in early March 2018 as part of the Marriott Autograph Collection. The redeveloped **Cavalier** hotel includes three signature restaurant offerings, including Becca, Hunt Room and The Raleigh Room. In addition, a new full service 282 room Marriott flag hotel and conference center has begun construction. The remaining "Pacific Parcel", located on the west side of Pacific Avenue and north of 40th Street includes approximately 2.54 acres and has been dedicated to parking and recreation uses.







The "New" Cavalier Project Images

In total, the new Cavalier Hotel, Beach Club and Marriott Oceanfront Hotel are expected to add an additional 24,000 sf of restaurant and bar space to the **Resort Area** along with additional incidental retail space. The **Lambert Report** (as defined in **Section X** below) estimates that the **Cavalier Project** will contribute substantially to the generation of demand for an additional 89,000 square feet of new retail space and 30,200 square feet of new restaurant space in the **Resort Area**, and will add only approximately 28,000 sf of combined new retail and restaurant space itself.

SECTION VI

Market Fundamentals

While the proposed **Wave** will be located within the **City of Virginia Beach Resort Area**, the **Project** is located within, and will be significantly influenced by market conditions, in the greater **Hampton Roads Region**. As such, we are providing a comprehensive regional overview below.

A. Hampton Roads Region Overview

The **Hampton Roads Region** is a part of the Atlantic coastal plain comprised of southeast Virginia, northeastern North Carolina and portions of Maryland located as part of the larger Atlantic coast and Chesapeake Bay ecosystems. The **Hampton Roads Region** includes the Virginia Beach-



Hampton Roads MSA

Norfolk-Newport News, VA-NC, Metropolitan Statistical Area (the "MSA" or the "Hampton Roads MSA") which consists of sixteen county-level jurisdictions within five counties and nine independent cities in Virginia (and two counties in northeastern North Carolina), including the cites of Norfolk, Virginia Beach, Chesapeake, Portsmouth, Newport News, Hampton and Suffolk.



Major Hampton Roads Jurisdictions

The **Hampton Roads MSA** covers 3,132.6 square miles and includes approximately 1,674,801 full time residents with a median age of 37.1 years. The **MSA** includes approximately 659,266 households and ranks 37thin size (out of 382 MSAs nationwide) among all Metropolitan Statistical Areas in the United States. Approximately 31.4% of **Hampton Roads MSA** residents over 25 years in age have earned a

bachelor's degree or higher. We have attached a full set of **Hampton Roads MSA** demographics hereto as **Exhibit A**.

The Hampton Roads Region is known for its large military presence, ice-free harbor, shipyards, coal piers, and miles of Atlantic Oceanfront property and beaches, all of which contribute to the diversity and stability of the region's economy.

B. Hampton Roads Transportation System

The Hampton Roads Region and **Virginia Beach** are served by numerous highways including Interstate 64, U.S. 460 and U.S. 58 running east and west. From the north and south, the area is accessible via Interstate 85, Interstate 95, U.S. 17 and U.S.13.

Although the **Hampton Roads Region** is smaller than most Eastern Seaboard cities to the north, it often suffers from traffic congestion due to the large number of waterways and waterway crossings geographically crisscrossing most of the region. Most major roads and highways serving **Virginia Beach** connect to the extensive East Coast regional highway system via Interstate 64, which connects with the Virginia Beach-Norfolk Expressway (Interstate 264) to Richmond, VA and points beyond.



Virginia Beach Transportation Map

The region is also connected to the Delmarva Peninsula and points north from the States of Maryland and Delaware via the Chesapeake Bay Bridge Tunnel, a 17-mile span connecting Virginia's Delmarva Eastern Shore communities to **Virginia Beach** and the larger **Hampton Roads Region**.

Public transportation within **Hampton Roads** is provided primarily by Hampton Roads Transit. Hampton Roads Transit also operated the more limited "Tides" light rail transit system, however, in November 2016, residents of **Virginia Beach** voted against extension of the light rail system into **Virginia Beach**.

The **Hampton Roads Region** is served by Norfolk International Airport ("ORF"), located approximately 17 miles from Virginia. Newport News/Williamsburg International Airport, approximately 42 miles west of Norfolk International Airport, provides limited additional service. Norfolk International Airport is served by Allegiant, American, Delta, Southwest and United Airlines, most providing limited service to larger East Coast hub operations.



Norfolk International Airport ("ORF")

C. Hampton Roads Region Demographic and Economic Overview

The Hampton Roads Regional economy has become increasingly dependent upon defense spending over the past decade and Department of Defense spending accounts for 45.6% of all regional economic activity in the region. The military currently has 64 ships homeported in the area and 36 aircraft squadrons. They also have a variety of Navy Special Forces and support units in the market.





Hampton Roads Military Bases

In addition to the major military presence in the **Hampton Roads Region**, the region attracts a wide array of both domestic and international private industry military support corporate offices and facilities. We are providing below a list of the 20 largest employers operating in the greater **Hampton Roads Region**.

TOP 20 HAMPTON ROADS REGION EMPLOYERS

No.	Company	Employed	Industry	
1	United States Federal Government	50,000	Government/Military	
2	Sentara Healthcare	15,000	Health Care / Services	
3	Virginia Beach City Public Schools	10,000	Government	
4	Norfolk Naval Shipyard	7,000	Government/Military	
5	Norfolk City Public Schools	6,527	Government	
6	Virginia Beach City	6,000	Government/Military	
7	Dominion Enterprises (Trader	5,700	Services	
	Publishing)			
8	Wal-Mart Stores	5,270	Retail	
9	Chesapeake City Public Schools	5,200	Government	
10	Portsmouth Naval Medical Center	4,770	Government/Military	
11	Farm Fresh	4,400	Retail	
12	Norfolk City	4,364	Government/Military	
13	Bon Secours Hampton Roads Health	4,000	Health Care / Services	
	System			
14	Old Dominion University	4,000	Government/Military	
15	Bank of America	3,600	Restaurant Industry	
16	Naval Medical Center Portsmouth	3,500	Government/Military	
17	United States Postal Service	3,500	Government/Military	
18	Smithfield Foods	3,223	Manufacturing	
19	Amerigroup Corporation	3,000	FIRE	
20	Portsmouth City Public Schools	3,000	Government/Military	

Major military units and headquarters located in the **Hampton Roads Region** include NATO's Allied Command Transformation, U.S. Joint Forces Command, U.S. Fleet Forces Command, the U.S. Air Force's Air Combat Command, U.S. Marine Corps Forces Command, and the U.S. Army Training and Doctrine Command.

D. Virginia Beach Demographic and Economic Overview

The **City of Virginia Beach** is part of the **Hampton Roads Region** and is located at the southeastern coast of the State of Virginia and bordering the Atlantic Ocean at the mouth of the Chesapeake Bay. The **City** represents is the largest city in the State of Virginia and is ranked as the 43rd most populous city in the United States.



City of Virginia Beach, Virginia

Virginia Beach is home to approximately 456,968 residents and is projected to grow to 461,408 residents by 2022. The **City** covers 497.0 square miles and includes 177,959 households. The median age of **City** residents 35.1 years.





The Virginia Beach Resort Area

The **Virginia Beach Resort Area** features miles of beaches and hundreds of hotels, motels, and restaurants and includes a daytime population of 195,414 employees. It is also home to several state parks, three military bases, a number of large corporations, two universities, international headquarters and numerous historic sites. **Virginia Beach** is listed in the *Guinness Book of Records* for having the longest pleasure beach in the world. We have attached a full set of **Virginia Beach**, **VA** demographics hereto as **Exhibit B**.

The **City of Virginia Beach** unemployment rate stood at 3.1% as compared to the national rate of 4.1% as of March 2018. A partial list of major employers operating in the **City of Virginia Beach** is included in the chart below.

MAJOR VIRGINIA BEACH EMPLOYERS

No.	Company	Industry
1	City of Virginia Beach Schools	Government/Education
2	City of Virginia Beach	Local Government
3	U.S. Department of Defense	Government/Military
4	Sentara Healthcare	Insurance
5	GEICO General Insurance Company	Insurance
6	General Growth Props. (Lynnhaven Mall)	Owner/Operator Malls
7	STIHL Incorporated	Headquarters /Manufacturer
8	Walmart Corporation	Retail
9	Gold Key/PHR Hotels & Resorts	Hospitality
10	Amerigroup (Anthem)	Insurance
11	LoanCare Servicing Center, Inc.	Financial Services
12	Engility Corp.	Engineering Services
13	LifeNet Health	Healthcare
14	Christian Broadcasting Network	Broadcasting
15.	Harmony Investments	Hospitality

Section VII

Competitive Landscape

A. Introduction

We are providing below a review of retail competition in three distinct market segments that we believe are most directly impactful to the **Project** as currently conceived. These market segments include **Specialty Retail** offerings located throughout the **Hampton Roads Region**, **Commodity Retail** offerings located in the **City of Virginia Beach**, and retail offerings of all types located in the **Resort Area**. A review of each of these market areas is provided below.

B. Hampton Roads Region Specialty Retail

The **Hampton Roads Region** is served by an abundance of **Specialty Retail** offerings, many of which underperform and each of which competes for market share in a market oversupplied in **Specialty Retail**.

Major **Specialty Retail** centers operating in the region include the following;

1. Lynnhaven Mall

Lynnhaven Mall, an enclosed regional mall developed by Simon Properties and opened in August 1981, today represents the largest **Specialty Retail** collection in the **Hampton Roads** region. The mall, now owned by GGP, Inc., is located 10-minutes from the **Resort Area** in the **City of Virginia Beach**, and contains approximately 1.17 million square feet of retail space and more than one hundred thirty stores.





Lynnhaven Mall - Virginia Beach, Virginia

The mall, which reportedly produces sales of approximately \$650 per square foot, includes a strong mix of premium brands including Apple, Michael Kors, Sephora, H & M and LL Bean, and is anchored by Dillard's JCPenney, Macy's and AMC 18 Theatres.

2. MacArthur Center

MacArthur Center, a three-level enclosed regional shopping mall located in downtown Norfolk, VA, was developed by luxury mall operator Taubman Company and opened in March 1999. The underperforming mall was sold to Starwood Capital Group in 2014.





MacArthur Center - Norfolk, Virginia

Although the mall is the only **Specialty Retail** center anchored by a Nordstrom department store and includes many of the region's **top** retail brands, including Apple, Williams-Sonoma, Banana Republic and Sephora, the Nordstrom department store is one of the poorest performing Nordstrom units in the chain and is expected by many industry observers to close when its operating covenant expires.

Current owner, Starwood Capital Group, is reportedly planning to redevelop the center into a mixed-use Center including hotels, residential, restaurant and entertainment offerings and a pedestrian-friendly public square featuring art and community-oriented amenities.

3. La Promenade Distinctive Shops

La Promenade Distinctive Shops is located on Laskin Road, just a few short miles from the **Virginia Beach Resort Area**. The outdoor center, located close to some of the **Hampton Roads Region's** most affluent neighborhoods, includes an edited selection of some of the region's most exclusive stores including Yves Delorme, Williams Sonoma, Talbots, Talbots Petites, and Talbots Woman, along with local shops, restaurants and cafes.



La Promenade Distinctive Shops - Virginia Beach, Virginia

La Promenade Distinctive Shops has been a **Virginia Beach** mainstay for decades and continues to maintain its status today as one of the region's most exclusive addresses.

4. Virginia Beach Town Center

Virginia Beach Town Center was developed as a mixed-use center intended to become the civic and urban center of **Virginia Beach**. The project, located on Virginia Beach Boulevard, approximately 18 miles from the **Resort Area**, has not fully succeeded in producing an "Urban hub" for the **City**, however, it has become home to one of the region's strongest mix of **Specialty Retail** and entertainment concepts, including Anthropology, Barnes and Noble, Bluemercury, Brooks Brothers, LuLulemon Athletica, Free People and Ann Taylor Loft.





Virginia Beach Town Center - Virginia Beach, Virginia

The project, which also included the region's only Westin Hotel, also features the region's strongest collection of national restaurant concepts, including Ruth's Chris, Cheesecake

Factory, Gordon Biersch, California Pizza Kitchen, McCormick & Schmick's and P F Chang's, along with entertainment concepts Funny Bones Comedy Club and Regal Columbus Station. We consider Virginia Beach Town Center to be one of the most significant **Specialty Retail** competitors in the **Hampton Roads Region**.

5. Greenbrier Mall

Greenbrier Mall is a poorly producing regional mall located in Chesapeake, VA. The mall, owned and operated by CBL Properties, contains approximately 896,822 square feet of mid-level **Specialty Retail**. We believe this mall will continue to experience continuing sales declines as part of a fundamental nationwide shift and will eventually close as department store and mid-level mall sales continue to contract.





Greenbriar Mall - Chesapeake, Virginia

6. Patrick Henry Mall

Patrick Henry Mall, located on Interstate 64 and Jefferson Avenue in Newport News, VA, opened in 1987 and was the first mall in the region to feature a food court. Despite being





Patrick Henry Mall -- Newport News, Virginia

the only enclosed mall between **Virginia Beach** and Richmond, Virginia, the 717,000 sf mall, owned and operated by PREIT, produces under \$400 per sf in sales. We believe this mall will continue to experience continuing sales declines as part of a fundamental nationwide shift and will eventually close as department store and mid-level mall sales continue to contract.

7. Peninsula Town Center







Peninsula Town Center --- Hampton, Virginia

Peninsula Town Center, a 1.1 million of open air mixed-use project located in Hampton, VA, was redeveloped by Steiner + Associates to its current configuration. The open-air center, located on the site of the original Coliseum Mall, debuted in 2009 and failed during the Great Recession. It is currently being repositioned by new ownership, however it does not have a sustainable merchandising plan in place as of this date.

8. City Center at Oyster Point

City Center at Oyster Point is a 52-acre mixed-use development, including approximately 230,000 square feet of retail and restaurant space, at the heart of the peninsula's central business district in Newport News, VA. The retail portion of the project has struggled despite presence of 1 million square feet of Class A office space, residential density, and a Marriott Hotel and Conference Center in the center. The project, centered around a five-acre water feature and anchored by a 12 theater Cinemark Theater, includes little meaningful national retail.





City Center at Oyster Point - Newport News, Virginia

9. Norfolk Premium Outlets

Norfolk Premium Outlets, opened in June 2017 and located at the intersection of Interstate 64 and Route 13 in the heart of the **Hampton Roads Region**, represents one of a new generation of outlet centers located within the larger population centers of Norfolk and Virginia Beach. The Simon Property Group owned outlet center is located one mile from Norfolk International Airport, within 9 miles of the Norfolk waterfront and 18 miles west of the **Virginia Beach Resort Area**, and includes approximately 332,000 square feet of **Specialty Retail** outlet store space including Tommy Hilfiger, The North Face,







Norfolk Premium Outlets - Norfolk, Virginia

Michael Kors, Under Armour and Calvin Klein. We expect this well-located outlet center to contribute to eroding **Specialty Retail** sales at many of the market's weaker **Specialty Retail** centers.

10. Williamsburg Outlets

Williamsburg, VA is home to three outlet centers including Simon Property Group's Premium Outlet center, Tanger Outlets and an additional locally owned outlet center. The combined outlet presence in Williamsburg represents one of the most formidable **Specialty Retail** offerings in the **Hampton Roads Region**.

The largest of these centers, Simon's Williamsburg Premium Outlets, opened 1988 and was renovated and expanded in 2008, The center includes over 520,000 sf of luxury outlet stores including Burberry, Calvin Klein, Hugo Boss, Nike, Vineyard Vines, Polo Ralph Lauren, Cole Hahn, The North Face and Under Armour.







Williamsburg, Virginia Outlet Centers

C. Virginia Beach Commodity Retail Market

The **City of Virginia Beach** is fully served by a full complement of **Commodity Retail** stores, including a full complement of convenience stores, drug stores and grocery stores, many located in the **Resort Area**, as depicted on **Exhibit B** attached hereto.

While we do not believe that the **City** requires additional **Commodity Retail** at this time, we note that the **Resort Area** is not served by an upscale grocery store (Whole Foods is located approximately six miles



Whole Foods - Virginia Beach, Virginia

from the **Resort Area** on Laskin Road, however.) and that a correctly sized upscale grocery store would be a valuable addition to the **Resort Area** of **Virginia Beach**, particularly in light additional higher end residential units being added to the market.

D. Resort Area Retail

Retail offerings in the **Resort Area**, like most seasonal beach markets, consist primarily of a variety of restaurants, convenience retail and resort area gift, treat and sundries' shops.

While visitors to the **Virginia Beach Resort Area** come to the market with significant disposable income to spend, the market lacks any concentration of meaningful **Specialty Retail** other than traditional beach offerings along the **Boardwalk** and spotty offerings within the core **Resort Area**, mostly along Atlantic Avenue.









Boardwalk and Resort Retail and Entertainment

The most significant **Specialty Retail** offerings in the **Resort Area** consist of a wide array of tourist-oriented food and restaurant offerings ranging from better "sit down" resort-style seafood and related offerings to pizza shops, fast casual offerings and Boardwalk style "treat" offerings.

More recent projects along Atlantic Avenue, in particular, have added new retail space, however we consider most of that retail space to have added only incrementally to the market with none of those projects have added significantly to the overall appeal or draw of the market.

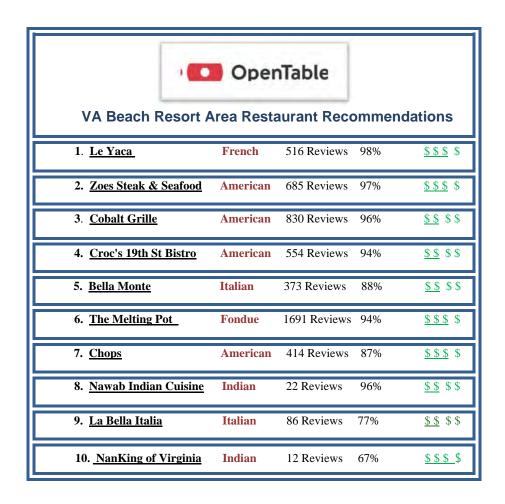




Ocean Sky Retail Center - Virginia Beach, VA

The Pier Shops - 1400 Atlantic Ave - Virginia Beach, VA

Similarly, restaurant offerings in the market, while adequate, for the most part fail to offer excitement, innovation or current appeal. A recent search of Open Table yielded the following top 10 list of restaurants (by star rating) located in the **Resort Area.**



None of today's more innovative concepts, like the West Coast's Lemonade and Flower Child concepts, are represented in the market at present, and as indicated above, best in class national restraint chains have shunned the **Resort Area** in favor Virginia Beach Town Center and other alternate locations in the **Hampton Roads Region**.





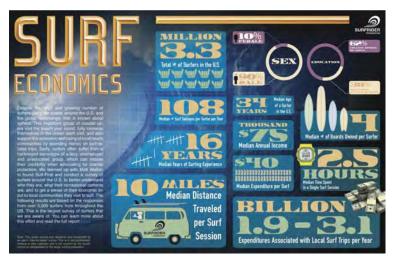
West Coast Fast Casual Restaurants, Lemonade and Flower Child

Section VIII

The Surfing Industry

A. Introduction

The centerpiece of the **Project** will be the "**Wave Garden**" **Surf Park** designed to offer world class manmade surfing conditions to audiences ranging from aspiring amateurs to the world's best competitive surfers. With this in mind, we believe that the success of the **Project** will be disproportionately dependent on the strength of the "surfing market" accessed by the **Project** and the ability of the **Surf Pool** to function as a year-round world-class attraction capable of drawing new visitors to the market and generating excitement and buzz within the surfing community.



Select Surf Economics

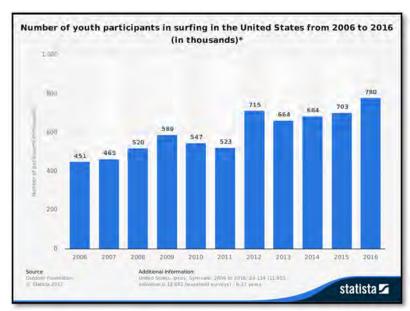
Although we were provided with a portion of the **Wave Garden** Feasibility Report (the "**Wave Garden Report**"), we were not provided with information underlying all of **Wave Garden's** assumptions which are independently verifiable or otherwise adequate for us to reach reliable conclusions from.

While we have no reason to believe that the conclusions reached in the **Wave Garden Report** are not valid, we also believe that by providing additional background information on the surfing industry, we will further strengthen the conclusions and recommendations in our **Report**.

B. Surfing Industry

According to the Surfing Industry Manufacturers Association, 35 million surfers participate in the sport worldwide, with 3.3 million surfers residing in the United States. 49% of surfing expenditures, however, are reported to take place in the United States. The surfing industry is growing at between 12 and 15 percent annually, with total surfing industry revenue reaching an estimated \$13.2 billion in 2017, \$1.6 billion from surf footwear sales alone. (By comparison, estimated annual revenue in the golfing industry is estimated to have reached just under \$35 billion in 2017.)

As indicated in the Outdoor Foundation/Statista table below, youth participation in surfing increased by 73% from 2006 to 2016, making it one of the fastest growing sports in the country.



U.S. Surfing Participation 2006-2016

The industry is considered most directly comparable to the snow sport industry where a reported 54% of all industry revenue, approximately \$3.5 Billion in the Unites States alone 2017, is generated from lift ticket sales. The Surfing Industry Manufacturers Association estimates that the potential annual U.S. market for surf park revenue could reach over \$8.10 billion



Surfing is perceived as "Cool" and Exciting

A recent analysis of surfing industry participants found that while 90% are male, female involvement in the sport through retail and related activities is closer to 50%. Surfers average over 100 surf sessions per year and spend an average of over \$50.00 per session, and approximately 62 % of surfers have graduated from college.

Revenues generated by the surfing industry are derived from a diverse range of sources, including Surf Parks and surfing equipment, training academies, retail and equipment rental and associated food and beverage sales. Surf industry revenues from branding, sponsorship and licensing is small today as compared to other more established sports like golf and tennis, however revenues from these sources are expected to grow disproportionately in coming years as interest in the sport increases and additional Surf Parks come on line.

Perhaps no industry fact more meaningfully demonstrates the rising stature of the sport than the decision of the International Olympic Committee to add surfing as an Olympic sport at the 2020 Tokyo Summer Games.





Many surf industry observers believe that with the additional exposure provided by the upcoming Olympic coverage, the surfing industry will see a surge in participation and popularity in the coming decade.

C. East Coast Surfing Facts

Despite the attention given to popular surfer destinations in California and Hawaii, the East Coast of the United States is one of the most popular surfing destinations in the world, due largely to its large population (38% of U.S. population lives on the East Coast), the popularity of well-known surfing destinations from Florida to New England and the availability of all-weather surfing equipment allowing year-round surfing in most locations.

Men's Journal reports that North Carolina's Cape Hatteras and Outer Banks, located in close proximity to **Virginia Beach**, is one of the "Six Most Popular" East Coast surfing destinations for in-the-know surfers. The region, known for its steep continental shelf drop-off, produces sets of powerful, medium-size (but wide) beach breaks. "Hatteras itself oozes a laid-back vibe and, when coupled with the larger ocean swells from the south, a West Coaster would be forgiven for comparing it to Malibu (only, as the summer progresses, the water gets far warmer here than in SoCal)." reported Men's Journal in 2012.

D. Wave and Surf Parks Industry

Our review of the emerging wave and surf park industry found only four significant parks currently operating in the United States, with only two offering "surf quality" waves and none operating on East Coast. We are providing below a list of what we believe to be the 15 most significant wave and surf park attractions operating around the world, with the additional guidance that many of these parks offer only recreational wave pools not suitable for surfing.

Top Fifteen Surf & Wave Parks				
Operating Worldwide				
1. Wave House, San Diego, CA				
2. Typhoon Lagoon, Disney World, FL				
3. Kalahari, The Dells, WI				
4. Avalanche Bay, Boyne Falls, MI				
5. Big Surf, Tempe, AZ				
6. Siam Park, Spain				
7. Surf Snowdome, Snowdonia, Wales				
8. Wave Garden Cove, Bristol, England				
9. Wave Garden, Basque Country, France				
10. Unit Parktech, Langfeld, Germany				
11. Himlabadet, Sweden				
12. Wadi Adventure Surf Park, Dubai, UAE				
13. Ocean Dome, Miyazaki, Japan				
14.Sunway Lagoon Theme Park, Malasia				
15. Weber Surf Parks, Australia				

In addition, except as indicated in **Section XI (A)** below, almost all wave parks we are aware of are not associated with meaningful retail shopping facilities, and among the few that are associated with retail centers, we have not been able to identify any surf parks that form the centerpiece of a retail or mixed-use development.

Section IX

Trade Area Analysis

A. "Trade Area" Demographics

While we do not believe that conventional demographic analysis is generally applicable to seasonal and resort area retail, we are presenting below a basic review of market size and characteristics for the **Hampton Roads Region**, the **City of Virginia Beach** and in a three mile radius around the **Resort Area** in the chart below.

The Wave Specialty Retail Trade Area and Select Ring Demographics						
Demographic Segment	Hampton Roads	VA Beach	3 Mile Ring			
Population - 2017	1,674,801	456,968	44,276			
Population - 2022 (Est.)	1,692,645	461,408	45,175			
Population - Annual Growth 2017-2022 (Est.)	0.20%	0.20%	0.03%			
Households - 2017	659,266	177.050	20.024			
Households - 2017	039,200	177,959	20,934			
Average HH Income – 2017	\$84,915	\$\$94,124	\$93,636			
Median Age	37.1	35.1	39.1			
Education – College Graduates - 2017	356,771 (31.4%)	109,292 (35.2%)	23,243(42.6%)			

B. Virginia Beach Tourism Market

The Virginia Tourism Corporation reported approximately 15.2 million visitors traveled to **Virginia Beach** in 2016 for leisure or business travel, which represented a 9.4% increase over 2015. Visitation is estimated to have reached approximately 17.0 million in 2017. Approximately 8.1 million of these visitors came to the **City** for only one day, while 7.1 million stayed overnight for one or more nights. While travelers come to the market from across the country and globe, nearly 75% of visitors arrived by car and a reported 43 percent come to visit relatives.

The economic impact of visitors to **Virginia Beach** totaled nearly \$1.5 billion in direct travel-related expenditures with an average of \$4.1 million spent each day and an average of \$1,955 spent per visitor, generating \$132.1 million in state and local tax revenue.

Tourism also has a significant impact at the regional and state levels. In 2016, tourism-supported jobs totaled 47,315 equating to over \$1 billion in salaries with local and state taxes from activity in **Virginia Beach** providing \$407 million on the regional level. On a state level, spending by domestic travelers to Virginia equaled \$65 million per day with overall travel expenditures equaling \$23.7 billion which is a 3.3% increase from 2015. The tourism industry is the fifth largest private employer in Virginia supporting more than 229,000 jobs and \$5.6 billion in salaries.

While exact statistics on visitation to the **Virginia Beach Resort Area** are difficult to ascertain, our review of the Longwood international's Virginia Beach 2016 visitor Research Report as well the BCF Virginia

Beach Perception Study (Wave 2), dated October 28, 2016. indicate that trips to the market are heavily weighted to the prime Summer Beach months with the vast majority of trips originating from Mid-Atlantic and 31% of visitors staying in **Resort Area** hotels. As a result, we estimate that at least 50% of visitors coming to the market, or over 7.5 million visitors annually, have at least some contact with the **Resort Area**.

We believe that the **Project**, with its many attractions and one-of-a-kind East Coast **Surf Pool** will not only benefit disproportionally from tourism coming from outside of the **Hampton Roads Region** and also has a substantial probability of expanding the tourism market coming to the **Virginia Beach Resort Area**.



Virginia Beach Oceanfront Summer Crowds

Section X

Retail Potential

And Lambert Analysis

A. Retail Potential

While calculation of "spending potential" (or so-called "gap analysis") was historically used to substantiate the addition of new retail square footage to an existing market and to establish sales potential, we do not believe that such an analysis would yield meaningful results in this case, given the unconventional centerpiece of the **Project's** main **Surf Park** attraction and the lack similar retail projects available for comparison.

We do, however, believe that the **Resort Area**, while adequately served today with standard beach related retail and services, has little in the way of destination attractions and, with the exception of a small supply of quality restaurants, does not currently offer a mixed-use retail destination featuring the kind and quality of entertainment and retail components planned for the **Wave**.

With this in mind, we feel highly confident that the **Project**, with its central location in the **Resort Area** and unique first to market attractions, performance space, office and residential components, will not only support the creation of the 138,100 combined sf of retail and restaurant space (along with the more than 100,000 sf of entertainment and attraction space,) but is likely to create demand for additional square footage in the near-term future.

B. Lambert Analysis

We were asked to participate, along with Lambert Advisory ("Lambert"), in an analysis of od retail and restaurant capacity (the "Lambert Analysis") in the Resort Area, based upon completion of the Project, as described herein, along with all three additional projects planned for the Resort Area, as described in Section VI above.



While we engaged in extensive discussions with **Lambert**, the Displacement and Economic Impact Assessment, dated May, 2018 itself (the "**Lambert Analysis**") was completed independently by **Lambert**.

C. Existing Supply

Lambert estimates that current restaurant supply in the primary **Resort Area** totals approximately 500,000 sf at present, consisting primarily of full service restaurants, but also including fast casual, fast food and take out establishments. We estimate that a total of approximately 98,000 sf of new restaurant space is currently being planned for the four **Proposed Projects**, or approximately 20% of existing restaurant supply in the **Resort Area**.

We have not evaluated total retail supply, average rents, vacancy rates or other retail supply data for the **Resort Area** and have not relied on such information in reaching our conclusions for the **Wave.**

D. Lambert Displacement Findings

We concur with **Lambert's** overall conclusion that, based upon the assumptions set forth in the **Lambert Analysis**, the additional retail, restaurant and entertainment capacity planned in the four **Proposed Projects**, will result in an initial undersupply of approximately 42,500 square feet (the "**Undersupply**") in the first full year of operation of the **four Proposed Projects** (the "**Base Year**").

We recognize, however, that the exact year of opening of each project, the relative generation of new market demand from each project and the amount and type of retail space, particularly restaurant space, included in each project, along with other factors, may have a substantial bearing on the overall impact of new supply, particularly in the restaurant category, at any given point in time.

E. Impact of New Supply

As indicated in the **Lambert Analysis**, calculation of displacement involves both art and science in both arriving at assumptions underlying the analysis and in interpreting findings. As such we are providing the following additional discussion regarding projected **Oversupply**.

First, while not likely to occur, he addition of a disproportionate quantity of "restaurant space" at any given time, may result in a short-term possible oversupply of restaurant space, a condition which could potentially impact rents and occupancy in both the **Wave** and other **Proposed Projects.** We believe that any such short-term oversupply would be quickly offset by new demand as the market rebalances.

Given the overall importance of the **Wave Project** as tone of the single greatest net generators of new visits to the **Resort Area** among the **Proposed Projects**, and critical need for strong restaurant performance for the overall success of the **Wave**, we believe that the introduction of prime restaurant space associated with competing projects, particularly the **Fishing Pier**, a low impact net visit generator, should ideally be staggered to limit the risk of too much new restaurant supply being added to the market at any given time.

In addition, we believe that the following additional factors should be considered in interpreting the overall impact of the introduction of new restaurant space:

- **1. Normal Attrition.** Absent the introduction of new restaurant supply associated with the four **Proposed Projects**, normal attrition of existing restaurant supply would be expected to occur in the market, reducing current supply and requiring replacement.
- 2. Incremental Market Growth. Independent of the impact from the four Proposed Projects, Resort Area visitation and demand would be expected to continue to grow annually. In the even hat annual growth occurs at a modest 3.5% annually, for example, demand for additional retail and restaurant space would grow by 17,500 sf annually, reducing the impact of any possible short-term oversupply.

Section XI

Merchandising Recommendations

A. Introduction

The **Wave** is a unique mixed-use project that in many ways is a one of a kind retail opportunity. Our review of surf and wave parks operating throughout the world indicates that none are operating in markets or shopping facilities similar to those applicable in this case, and as such, they provide little guidance in arriving at a merchandising plan for the **Wave**.

We have identified two wave attractions associated with major shopping venues, Wave Park Gateway, at Gateway Mall in Durbin, South Africa, and Oana Surf, at Switzerland Mall near Lucerne, Switzerland, however in neither case is the wave pool central to the merchandising plan or shopping experience.







Wave Park Gateway – Gateway Mall Durbin, South Africa

Based upon our review of beach front and resort area retail throughout the United States, we have identified key principles applicable to successful resort area retail that can provide meaningful guidance in merchandising the **Wave**.

Successful resort-oriented projects like the **Wave** tend to offer authentic local merchandising, featuring one-of-a kind local eateries, merchants and artisans, along with compelling, often one of a kind, entertainment and attractions. Visitors rarely are motivated to spend vacation time and dollars at retail centers offering stores located in their home markets or in shopping venues readily available in close proximity to the resort area in question (conditions that exist in the case of the **Virginia Beach Resort Area**).

Although not similar in plan or anchoring to the **Project**, we point to St. Armands Circle, an organic collection of **Specialty Retail** streets and stores, organized around an historic park-like traffic circle, in Sarasota Florida, as one of the most successful resort area retail collections we are aware of in the United States. St. Armands Circle thrives in Sarasota, despite its close proximity to three local area malls, countless chain restaurants and countless commodity retail offerings, by offering a compelling array of local and regional shops and restaurants in an authentic and appealing environment.







St. Armands Circle Retail - Sarasota, Florida

One recent project that has failed to resonate with visitors opened in 2015, in America's "Surf City", Huntington Beach, California. Despite being built to impeccable standards, including lush landscaping and authentic wood "boardwalks", and its location directly across Pacific Coast Highway from the Pacific Ocean, the project performs below expectations. We believe that two of the primary reasons its poor performance are (1) the lack of unique entertainment and attraction anchors and (2) the inclusion of many national retailers readily available in nearby Orange County, CA markets and in visitors' home markets.



Pacific City - Huntington Beach, CA

B. Project Conditions

Given the dimensions of the **Wave Property** itself as well as the large footprint of the **Surf Park**, the site plan for the **Wave** does not follow traditional shopping center or mixed-use design or planning principles. In addition, the **Wave**, by the nature of its multi-block layout, takes on an urban feel and appearance. Urban streets, however, bordering low density "neighborhoods", often function as one sided blocks, in this case, particularly along 20th Street, which pose additional merchandising challenges.

We do believe, however, that the **Project's** unique and compelling attractions and entertainment anchors, along with its central **Resort Area** location, provide an exceptional retail opportunity.



The Wave Ground Floor Plan

Finally, the **Wave** is planned to include more than half of its retail square footage on the second floor, requiring additional planning attention. Given the difficulties of bringing pedestrian traffic to second floor retail locations in general, we recommend that second-floor retail should be limited to destination attractions and larger format destination restaurants.

C. The Wave Retail Merchandising Strategy

While we recognize that the site plan and merchandising strategy for the **Wave** have not been finalized at this time, we are providing below, a review of current merchandising initiatives as well as additional merchandising recommendations for the **Project.**

1. North West Block Retail

We believe that the **North West Block** should serve as a bridge to both the **Vibe District** and **Convention Center** to the west and to the heart of the **Project** to the east. While efficient access to convenient parking will be essential for successful a grocery store at the western end of the **North West Building**, it would also be desirable for that end of the building to should serve as a gateway to the nearby **Vibe District**.

The eastern end of the **North West Building** should serve as a complimentary bookend to the Surf Park and as an introduction to the heart of the **Project**.

At present, the **Wave** merchandising plan calls for the following uses to be located in the **North West Building**:

a. Specialty Grocery Store

While we recognize that retail square footage will need to be dedicated to the everyday needs of **both** residents and visitors to the **Wave**, we also recognize that the area is well-served with nearby **Commodity** retail offerings that will not need to be duplicated or supplemented in the **Project**.





Kimberton Whole Foods

Despite this overall recommendation, we believe that a high-end specialty grocery store would be a unique and effective addition to the **Project** and the **Resort Area**. We recommend, however, that **Venture** consider a smaller scale grocery store, between 15,000 and 25,000 sq ft in size. We are aware of a growing market for smaller specialized grocery stores such as Kimberton Whole Foods, a suburban Philadelphia specialty foods grocer and Mon's a similar operation in the Washington, D.C.market, producing industry leading sales of \$1,000 psf and higher.

b. National Geographic

Venture is negotiating with National Geographic to locate a National Geographic Experience Attraction in approximately 35,000 square feet a second-floor location in the **North West Building**. Although no feasibility study has been completed on the proposed attraction at this time, we believe that such a facility, now operating in select

U.S. and international markets around the world, would diversify the target audience and overall appeal of the **Wave**.



National Geographic Encounter Attraction - New York, New York

We do, however, recommend that **Venture** consider creating a prominent first floor entrance for National Geographic to enhance overall **Project** appeal and introduce a sense of excitement and connectivity at the ground floor level of the **Project**.

c. Cinepolis (Or Similar) Theater

The current plan for the **Wave** includes a proposed 45,000 sf "plush recline" **Cinepolis** or similar theater adjacent to National Geographic on second-floor of the **North West Building**. Although we recommend that **Venture** also consider attracting other operators such as Alamo Draft House, we strongly endorse introducing a modern "plush recline" theater in the **Project**.



Cinepolis Luxury Cinema - Del Mar, California

As with National Geographic above, we recommend that **Venture** consider creating a first-floor entrance and box office for the theater, along with a prominent marque, in order to enhance overall **Project** appeal and introduce a sense of excitement and connectivity at the ground floor level of the **Project**.

d. Additional Ground Floor Merchandising

In addition to the grocery, entertainment and attraction concepts described above, **we** recommend that **Venture** consider adding additional attractions and/or food and beverage concepts, as discussed below, in the remaining ground floor space in the **North West Building**. We believe that adding such a use(s) will assist in defining the unique destination appeal of the **Project** and potentially assist in connecting the **Project** with the emerging **Vibe District** just steps away.

2. North Block Retail

The primary focus of the **Project** will be on the **Surf Park** itself along with the rows of retail stores and restaurants located to the north of the pool on the ground and second floors of the **North Building**.

The **Surf Park** is expected to be the single largest attraction drawing visitors to the **Wave**. According to the **Wave Garden** Virginia Bach Economic Feasibility Study (the "**Surf Park Feasibility Study**"), dated March 28, 2018, **Wave Garden** estimates that the **Surf Park** will attract 97,867 paying customers annually from a market estimated to include over 8.3 million potential customers.



Munich Airport (MUC) Surf Park

With the annual capacity of the **Surf Park** estimated at 272,000 "rides", the pool will be capable of drawing nearly three times its estimated draw at maximum capacity. In addition to the **Wave Pool**, **Venture** has, at present, proposed the following merchandising components in the **North Building**:

a. Rock Climbing Attraction

Venture is considering including an active lifestyles rock climbing facility designed to foster community through rock climbing, fitness, arts and culture and active co-working, for the central location on the second floor of the **North Building**. While we believe this is an attractive use for the **Project**, we also believe that the second floor of the **North Building** is an ideal location for destination restaurants and clubs that can benefit from the position overlooking the **Surf Park**.

This use may be an ideal candidate to occupy a portion of the ground floor of the **North West Building**, if size and space needs can be accommodated there.

b. Virtual Reality Attraction

Venture's is considering including an experimental 15,000 sf experiential virtual reality concept to be developed by Josh Wexler, best known as a producer and writer for Mortal Kombat: Annihilation (1997), and Marvel Super Heroes 4D (2010), to be located on the second floor of the northeast corner **North Building.** While details of the new concept are not available as of the date of this **Report**, we believe that this concept, when designed, has the potential to become a destination unto itself and offers the **Project** another opportunity to diversify its overall appeal and help link the **Project** to the **Vibe District**.

As with National Geographic above, we recommend that **Venture** consider creating a first-floor entrance and box office for the **Bridge**, along with a prominent marque, in order to enhance overall **Project** appeal and introduce a sense of excitement and connectivity at the ground floor level of the **Project**.

c. Additional Ground Floor Merchandising

We recommend that **Venture** merchandise a combination of food and beverage concepts and core surfing and related merchandise in the ground floor space in the **North Building**. We believe this location will have the highest volume of pedestrian traffic in the **Project** and provides the greatest visibility and branding potential for retailers and restaurants alike.



The Shore Boutique and Restaurant - Sarasota, FL

d. Additional Second Floor Merchandising

In addition to the entertainment and attraction concepts described above, we recommend that the balance of second floor space be dedicated to destination food and beverage concept(s) and/or to entertainment and attractions.

3. Church Block Retail

We recommend that ground floor retail space in the **Church Building** be merchandised with one or more uses described in **Section X (C) (5)** below.

Wherever possible, we recommend that stores occupying space located along Baltic and Pacific Avenues be sized and merchandised to avoid storefronts opening to the street midblock between the main body of the **Project** and 20th Street. These locations will not generally be well suited for smaller store formats unless sufficient pedestrian traffic can be demonstrated.

4. South Block

We recommend that any ground floor retail space in the in the **South Building** that is not otherwise used for the **Entertainment Center** be merchandised with one or more uses described in **Section X (C) (5)** below.

5. Additional Merchandising Recommendations

a. Food and Beverage Offerings

We believe that one of the key drivers of success in the **Project** will be the introduction of a diverse collection food and beverage concepts designed to both appeal to the diverse mix of visitors attracted to the **Wave** and create unique appeal for other visitors to the

market by featuring best in class local and regional cuisine. While we defer specific restaurant recommendations to **Venture's** leasing team, we are providing below an outline of specific food and beverage uses we believe that will complement the **Wave Pool** audience, surfing enthusiasts, and patrons visiting the diverse collection of restaurants and attractions at the **Wave.**

i. Authentic Local dining: Signature large format local restaurant having best in class beach inspired cuisine appealing to a wide array of palettes, consistent with the signature one-of-a-kind destination restaurants pictured below:







Authentic Original American Seafood Restaurant Institutions

ii. Beach and Surfing Inspired Cuisine: **Authentic** Surf restaurants and bars consistent with the one-of-a-kind destination restaurants depicted below:







Seal Beach and Huntington Beach Surf Restaurants

iii. Emerging National Restaurants: Emerging national and regional Restaurant Concepts consistent with those depicted below:





Snooze- Denver, CO and The Hampton Social - Chicago, IL

iv. Contemporary Restaurant Social Club: Contemporary Restaurant and Social Clubs, including those pictured below:







Kings Bowling - Doral, FL

v. Coffee, Bakeries and Cafes: Emerging Fourth Gen Coffee Houses and Cafes consistent with those depicted below:



Baked and Wired - Washington, DC







Local and Regional American Coffee Roasters

vi. Ice Cream and Treats: Best in Class Ice Cream, Treats and Candy consistent with those depicted below:







Best In Class Ice Cream and Treat Shops

d. Surf and Related Retail Merchants

The **Project** should include one or more authentic surf and surf apparel stores for both casual surfing observers and surfing enthusiasts alike, along with equipment and repair facilities for **Surf Park** participants.



East Of Maui - Rehoboth, Delaware

Section XII

Site Plan And Place-Making Considerations

A. General Considerations

In addition to the merchandising recommendations provided in **Section X** above, we are providing the following site plan, space planning and place-making recommendations, which we believe are integral to executing the merchandising recommendations provided above.



The Wave Ground Floor and Vicinity Plan (Subject to Change)

The **Wave** will be located approximately two blocks from the beach to the east and three blocks from the **Convention Center** to the west. While the **Project** is intended to become part of a comprehensive plan to link the **Boardwalk** to the **Convention Center**, it also must establish its own place in the community, including the **Entertainment District** and **Vibe District**, and establish an internal pedestrian flow of its own.

As indicated in **Section X** above, the **Project** has an unconventional mixed-use site plan that poses special challenges in establishing a pedestrian flow and sense of place. As such, we recommend that special attention be paid to wayfinding both internal to the **Project** and in connecting the **Project** to the distinct districts in which it resides. This includes establishing and reinforcing connections along 18th, 19th and 20th Streets, both east and west.

B. Place Making Considerations

The primary entertainment, attraction and dining orientation of the **Project** requires that both vehicular and pedestrian access to each attraction and entertainment venue be clearly established with both

vertical and horizontal connections. The introduction of escalators and elevators can result in unintended physical separations between buildings and "places" within the **Project**, and as such, we recommend that special attention be paid to establishing both pedestrian flow as well as an overall sense of place **Project**-wide.

Placemaking initiatives should include integration of hardscape, landscaping and amenities such as seating and fire pits, along with the establishment of viewing areas for the **Surf Park** that create activity and interest while not overwhelming the overall environment or blocking merchants and attractions.

C. Coordinated Events Programming

One of the most important keys to the success of **The Wave** will be establishing a frequent and compelling events schedule, not only for surfing enthusiasts, but also for visitors to the **Entertainment Venue**, to the **Entertainment** and **Vibe Districts** specifically, and to the **Resort Area** generally, including aggressive promotion via social media, travel publications, surfing industry media, traditional advertising resources and through licensing, sponsorship and related brand extension initiatives.

A well-coordinated events program will not only bring regular traffic to the **Project** but also has the potential to extend the reach and recognition of the **Project** locally, regionally and nationally. Although it is not directly applicable to the **Wave**, we point to the Grove, in Los Angeles, CA as perhaps the best example of events programming, including becoming the host location for TV's "Extra" entertainment show.

Section XIII

Additional Considerations And Limitations

A. Financial Analysis

This **Report** is intended to provide analysis and merchandising recommendations for **The Wave**.

Although this **Report** does not include a financial analysis of the various options recommended, it is intended to provide a template for achieving the goals of the recommended merchandising plan in a financially sound manner.

B. Assumptions and Limiting Conditions

The various findings, conclusions, and recommendations outlined in this **Report** are based on a review of information derived from a variety of sources deemed reliable by **SiteWorks**. **SiteWorks**, however, assumes no responsibility or liability for individual data items.



Displacement & Economic Impact Assessment The Wave In Context of Oceanfront Resort District Virginia Beach

July, 2018

VIRGINIA BEACH

Two Major Proposed Public or Public/Private Projects Proposed in Oceanfront Resort District

There are two major projects in the Oceanfront Resort District for which the City of Virginia Beach is considering substantial public investment. These projects are in addition to the Cavalier project for which the City recently participated financially and the first phase of which has now opened. The first new project, The Wave (Dome), is a mixed use retail, residential, entertainment, and office project located several blocks off the beach primarily between Pacific Avenue and Baltic Avenue eastto-west and 18th and 20th streets north-to-south. The second, a indoor Sports Complex of more than 200,000 square feet located adjacent to the Convention Center is aimed at driving visitation in the City with a particular emphasis on non-peak seasonal visitation. While the two projects are untied, they certainly will impact one another and understanding the interrelationship of these two projects is important to guiding the City's investment decision making process.



Two Principal Questions the Lambert Advisory Economic Assessment Helps Answer

- Do the economic and fiscal benefits of The Wave project exceed the public commitment of funds to the project? (a measure of return-on-investment for the Virginia Beach community)
- When looking at the project in a citywide context; to what extent does the economic and fiscal activity generated from a given project displace economic and fiscal activity already being generated within the City?

Important to measure <u>net</u> economic and fiscal impacts generated by a project which is the recipient of public investment, not total economic activity.

SECTION ONE

What is Displacement and Is it Bad?

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LAMBERT ADVISORY

DATA GUIDED STRATEGY

What is Sales Displacement? An Illustration

Portion of sales from a restaurant opened in 1998...



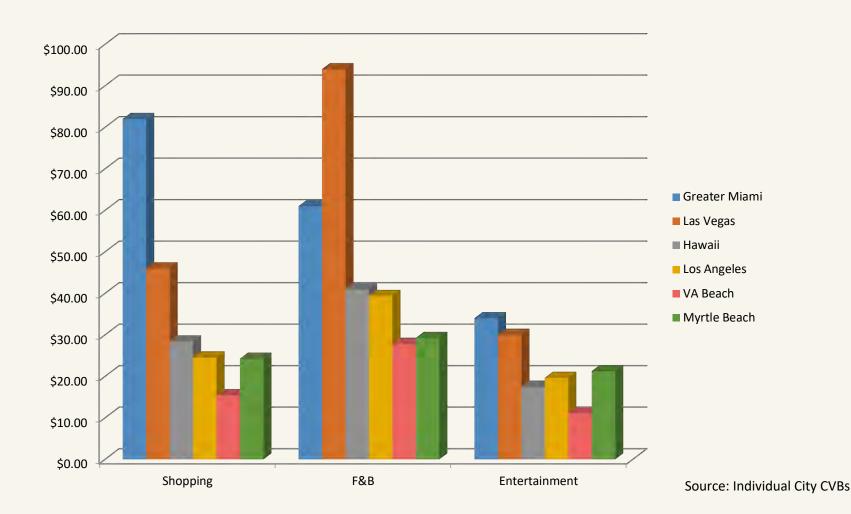
... through customer choice is now made at a restaurant opened in 2018



Is Displacement Bad?

- Not necessarily.....it's natural in a market economy
- Displacement however is not good when government intervenes and uses public money that could move economic and taxable activity from one business to another entirely like business.
- Yet, important to take great care to not exclusively use measure of displacement when evaluating the prudency of public investment
 - Mathematical methodology for estimating displacement exists when comparing entirely like businesses.
 - However, no mathematical measures for determining if the qualitative qualities of one new business/development will encourage visitors/shoppers to:
 - Spend more money per visit than they would have with another business in the past
 - Draw visitors from a broader geographic region, or;
 - Become a catalyst for future private investment which improves the competitiveness of the city or district overall
 - Not all science....some art

There Should Be Room to Grow Visitor Retail & Restaurant Expenditure: Virginia Beach Per Person/Per Day Shopping, Eating, and Entertainment Expenditure by Overnight Guests is Below Many Other Major Visitor Markets.



SECTION TWO

How to Measure Net New Business Activity? Measure Forward Looking New Demand Only

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LAMBERT ADVISORY

DATA GUIDED STRATEGY

Seven Net New Potential Demand Drivers of Retail/Restaurants in Oceanfront Resort District through 2021

- 1. New residences in new units based upon a market analysis by Lambert Advisory completed for The Wave development project
- 2. New office workers based upon a market analysis by Lambert Advisory completed for The Wave development project
- 3. Additional hotel guests based upon the addition of hotel rooms in late planning or under construction between 2018 and 2021 and estimates of occupancy rates
- 4. New out-of-town participants, families, and coaches at Sports Complex based upon estimates developed by the City's Consultants and Convention & Visitors Bureau
- 5. New out-of-town attendance at Wave performance space based upon an analysis completed for The Wave
- **6.** New out-of-town Wave Garden surfers based upon an analysis completed for The Wave
- 7. New out-of-town visitors to other Wave attractions (NatGeo & Bridge) based upon estimated developed for The Wave

2021 Net New Demand for Retail/Restaurant: Residential

Based upon our study of the local housing submarket, we have estimated that there will be another 473 units of housing absorbed in the submarket through 2021. Given our retail trade model which is largely driven by the Economic Census and U.S. Consumer Expenditure Survey, we estimate that these new residences will generate another \$10.6 million in non-auto retail/restaurant expenditure which translates to a demand for nearly 30,000 square feet of retail space and 5,000 square feet of restaurant.

	2021
New Units Absorbed in Submarket 2018-2021 (Lambert)	473
Average VA Beach Household Income (U.S. Census)	\$86,500
Total New Household Income	\$40,914,500
% household income spent on non-auto retail goods/eating out (U.S. Consumer Expenditure Survey)	26%
Total new non-auto retail/eating out expenditure	\$10,637,770
% spent on retail goods (Economic Census; Lambert)	84%
% spent on food and beverage (Economic Census; Lambert)	16%
Retail Sales per Square Foot (Lambert)	\$300
Restaurant Sales per Square Foot (Lambert)	\$350
New Square Feet Demanded - Retail	29,800
New Square Feet Demanded - Restaurant	4,900

2021 Net New Demand for Retail/Restaurant: Office Workers

As is the case with residences, new office workers in the market generate their own retail and restaurant expenditure close to work. Based upon our study of the office market, we have estimated that there is demand for net absorption of 150,000 square feet of office space through 2021. Given an office worker retail trade model which is heavily based upon the ULI Expenditure Survey of Workers Close to Work, we estimate that these new workers will create demand for 11,000 square feet of retail space and 3,000 square feet of restaurant.

	2021
New Office Square Feet Absorbed in District 2018-2021 (Lambert)	150,000
Square Feet per Worker (BOMA)	200
New Workers in District	750
Annual Expenditure per Worker: Food Service & Drinking (ULI)	\$1,389
Annual Expenditure per Worker: Shopper Goods (ULI)	\$1,965
Annual Expenditure per Worker: Convenience Goods (ULI)	\$2,438
Retail Sales per Square Foot (Lambert)	\$300
Restaurant Sales per Square Foot (Lambert)	\$350
New Square Feet Demanded - Retail	11,000
New Square Feet Demanded - Restaurant	3,000

2021 Net New Demand for Retail/Restaurant: Hotel Guests

Not surprisingly in an area dominated by hotel rooms, the greatest source of expenditure for retail goods, entertainment, and in restaurants comes from visitors. Based upon information provided by the City, between 2018 and 2021, 480 new hotel rooms are likely to come on line. This is in addition to the ever growing homeshare (i.e. Airbnb) market which has been studied in the City by ODU. We estimate that new hotel rooms and additional homeshare demand will generate an additional 357,500 visitor days in Virginia Beach which based upon visitor surveys is expected to drive demand for **58,200** square feet of retail space and 28,400 square feet of restaurant.

	2021
New Oceanfront Resort Area Hotel Rooms 2018-2021 (City)	480
New Homeshare Rooms (ODU, Lambert)	232
Hotel Occupancy (Smith Travel; Lambert)	65%
Homeshare Occupancy (ODU, Lambert)	43%
Additional Occupied Rooms per Night	412
Persons per Room (Hotels 2.5; Homeshare 2.0)	2.4
Visitor Days	357,500
Average per Visitor Daily Meal Expenditure (City)	\$27.83
Average per Visitor Daily Entertainment Expenditure (City)	\$11.12
Average per Visitor Daily Retail Expenditure (City)	\$15.45
Sales per Square Foot (Restaurants)	\$350
Sales per Square Foot (Entertainment)	\$100
Sales per Square Foot (Retail)	\$300
New Square Feet Demanded – Retail/Entertainment	58,200
New Square Feet Demanded - Restaurant	28,400

What happens to restaurant expenditure when day trips increase?

- Not measured in our summary numbers except for specific entertainment attractions/venues because we do not have projections on general growth of day visitors but growth of day visitors in the future can have a tremendous impact on food and beverage expenditure
- In 2017 there were 8.9 million visitors who traveled more than 50 miles to visit Virginia Beach to spend the day (Longwoods International). This was an increase from 6.9 million in 2013 and the number of day visitors has grown each year since 2013 at growth rates as high as 9 percent per year.
- The Longwoods International study indicated that average daily expenditure for food and beverage in Virginia Beach among day visitors is \$22.33 per visitor or approximately \$200 million in total in 2017.
- Assuming a static \$22.33 per visitor (current dollars), the growth in the number of day visitors between 2013 and 2017 generated over 125,000 square feet in demand for additional restaurant and bar space at \$350 per square foot (current dollars) in sales.
- By extension, every 100,000 additional day visitors in the future is likely to generate an additional \$2.23 million in food and beverage sales or demand for another 6,400 square feet of restaurant and bar space.

2021 Net New Demand for Retail/Restaurant/Entertainment: Virginia Beach Sport Center

Quality amateur sports facilities with multiple courts or fields for tournament play has proven to be a significant driver of demand for room nights in many cities. Based upon CBV estimates of net new room night demand from the new Sports Center, the Center is expected to generate demand for 51,800 square feet of retail/entertainment space and 25,300 **square feet of restaurant**. Given that the Sports Complex project was just approved, we are confident that the hotel rooms currently in construction or in the late planning stages were not underwritten on the basis of the Sports Complex being operational. As a result, we have not double counted retail demand associated with the Sports Center which would otherwise be captured from new hotel rooms coming on line.

	2021
Net New Room Nights (VA Beach CVB)	90,900
Persons per Room	3.5
Visitor Days	318,150
Average per Visitor Daily Meal Expenditure (City)	\$27.83
Average per Visitor Daily Entertainment Expenditure (City)	\$11.12
Average per Visitor Daily Retail Expenditure (City)	\$15.45
Sales per Square Foot (Restaurants)	\$350
Sales per Square Foot (Entertainment)	\$100
Sales per Square Foot (Retail)	\$300
New Square Feet Demanded – Retail/Entertainment	51,800
New Square Feet Demanded - Restaurant	25,300

2021 Net New Demand for Retail/ Entertainment/Restaurant: Wave Performance Space

Additional restaurant expenditure will also be driven by The Wave's new performance space. With an estimated 190,000 non-Virginia Beach patrons and a per capita food and bar expenditure of \$22.33 among those performance patrons who just come in for the day plus 25% of out-of-town performance attendees we expect to stay overnight near the performance space is expected to drive demand **for** 12,900 square feet of restaurant and 2,500 square feet of retail.

	2021
Non-VA Beach Visitors (Wave)	190,000
Percent Out-of-Town Visitors Stay Overnight	25.00%
Per Capita Restaurant Spend Day Visitors (Longwood Study)	\$22.33
Overnight Event Visitors	47,500
Average per Visitor Daily Meal Expenditure (City)	\$27.83
Average per Visitor Daily Retail Expenditure (City)	\$15.45
Total Restaurant Expenditure (overnights + non-overnights)	\$4,500,000
Total Retail Expenditure (overnights)	\$734,000
Sales per Square Foot (Restaurants)	\$350
Sales per Square Foot (Retail)	\$300
New Square Feet Demanded - Restaurant	12,900
New Square Feet Demanded - Retail	2,500

2021 Net New Demand for Retail/Restaurant:

Wave Garden

Demand for additional food and beverage purchases will also driven by the centerpiece entertainment attraction at The Wave, Wave Garden's surf pool. Wave Garden estimates that there will be 65,000 surfers from beyond a 15-minute drive time, 42,300 of which will be overnight visitors already in the area. We estimate the 15 mile plus day visitors will generating a per capita expenditure of \$13.90 per surfer in restaurants. While the Wave Garden will be responsible for driving ½ of a day's expenditure by overnight visitors. These 65,000 visitors from outside of VA Beach are expected to drive demand for 6,200 square feet of restaurant and bar space, 2,200 square feet of retail, and 4,700 square feet of other entertainment venues.

	2021
Day Surfers From Beyond 15-minutes (Wave Garden)	22,600
Overnight Surfer (Wave Garden)	42,300
Party Size per Surfer	2.0
Per Capita Eating Spend per visit day visitor	\$22.33
Per Capita Eating Spend per overnight visitor (1/2 day)	\$13.90
Per Capita Retail spend overnight visitor (1/2 day)	\$7.71
Per Capita Other Entertainment spend overnight visitor (1/2 day)	\$5.56
Total Restaurant Expenditure	\$2,185,000
Total Retail Expenditure	\$652,000
Total Other Entertainment Expenditure	\$470,000
Sales per Square Foot (Restaurants)	\$350
Sales per Square Foot (Retail)	\$300
Sales per Square Foot (Other Entertainment)	\$100
New Square Feet Demanded – Restaurant	6,200
New Square Feet Demanded – Retail	2,200
New Square Feet Demanded – Other Entertainment	4,700

2021 Net New Demand for Retail/Restaurant:

Other Gates

The National Geographic (NatGeo) and Bridge gated venues will also generate demand. LDP estimates there will be over 228,000 out-of-town NatGeo visitors and approximately ½ of that or 114,000 visitors to the Bridge attraction (Madison Marquette). LDP and Madison estimate that 55 percent of these visitors will stay overnight. We estimate the out-of-town day visitors will generate a per capita expenditure of \$22.33 per visitor in restaurants while the NatGeo and Bridge will be responsible for driving ½ of a day's expenditure by overnight visitors. In sum, visitors from outside of VA Beach are expected to drive demand for 17,300 square feet of restaurant and bar space, 4,800 square feet of retail, and 10,400 square feet of other entertainment venues.

	2021
Day Visitors From Beyond 50 miles (LDP & Madison)	153,900
Overnight Visitors (LDP & Madison)	188,100
Per Capita Eating Spend per visit day visitor	\$22.33
Per Capita Eating Spend per overnight visitor (1/2 day)	\$13.90
Per Capita Retail spend overnight visitor (1/2 day)	\$7.71
Per Capita Other Entertainment spend overnight visitor (1/2 day)	\$5.56
Total Restaurant Expenditure	\$6,051,000
Total Retail Expenditure	\$1,450,300
Total Other Entertainment Expenditure	\$1,045,836
Sales per Square Foot (Restaurants)	\$350
Sales per Square Foot (Retail)	\$300
Sales per Square Foot (Other Entertainment)	\$100
New Square Feet Demanded – Restaurant	17,300
New Square Feet Demanded – Retail	4,800
New Square Feet Demanded – Other Entertainment	10,400

Summary: New Oceanfront Resort District Demand for Retail & Restaurant Space by 2021

	2021 Retail/Entertain New Square Feet Demanded	2021 Restaurant New Square Feet Demanded	Personal & Business Services Space (additional 15%) *	Total
New Residents	29,800	4,900		34,700
New Office Workers	11,000	3,000		14,000
New Hotel Guests in New Hotel Rooms	58,200	28,400		86,600
Overnight Virginia Beach Sports Center Visitors	51,800	25,300		77,100
Out-of-Town Wave Performance Space	2,500	12,900		15,400
Out-of-Town Wave Garden Surfers	6,900	6,200		13,100
Other Entertainment Gates – NatGeo & Bridge	<u>15,200</u>	<u>17,300</u>		<u>32,500</u>
Net New Square Feet Demanded & Absorbed	175,400	98,000	41,000	314,400

^{*} Personal & business services include services typically found in retail space which are not considered retail such as dry clean drop stores, real estate offices, urgent care medical centers, and hair salons

Summary: New Retail/Entertainment Demand vs. Proposed Supply

Two new projects: The Wave and Cavalier/Oceanfront Marriott include a significant amount of retail/restaurant space built or proposed. Together, as the table below indicates, the two projects will add another 271,900 square feet of retail, restaurant and entertainment retail in the District. Based upon our analysis highlighted and summarized in the pages above, if the two projects are delivered to the market prior to 2022, these two project will account for less than the additional 314,400 square feet of space we estimate will be demanded (partially driven by entertainment elements within The Wave project). While care needs to be taken to make sure there is an appropriate balance of space between traditional retail, entertainment space, and food consistent with demand for each, based upon the assumptions and analysis of demand there should be an approximately 42,500 additional square feet by the end of 2021 demanded which could be absorbed through the reduction of vacant space or other additions to the market.

New Projects Proposed/ Under Construction	Retail/Entertainment Retail/ Restaurant Space Sq. Feet
Estimated Net New Demand	314,400
Minus: The Wave	(243,900)
Minus: Cavalier/Oceanfront Marriott	(28,000)
Additional Sq. Ft. of Retail/Entertainment/Restaurant Space Demanded	42,500

SECTION THREE

WAVE DEVELOPMENT ECONOMIC IMPACT SUMMARY

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LAMBERT ADVISORY

DATA GUIDED STRATEGY

The Wave Project: Summary By Use Total Development Cost of \$337.8 million

The current mix and plan for The Wave is summarized in the table below. Based upon developer provided information, the total development cost of the project is estimated at nearly \$340 million.

Office	150,000 square feet
For-Rent Residential	426 units
Retail/Restaurants	138,100 square feet
Entertainment Retail/Fitness	60,800 square feet
Cinema	45,000 square feet
Wave Garden/Common Areas	229,000 square feet
Parking	1,825 spaces
Performance Space	3,500 seat

Economic Benefits from Construction: The Wave (all phases)

In sum, the nearly \$340 million in estimated development expenditure will produce substantial short term economic benefits in terms of employment and labor income in Virginia Beach. Based upon our IMPLAN model we estimate 2,300 direct construction jobs over the construction period and 3,600 total jobs including indirect and induced activity. This translates into total labor income of over \$195.4 million during construction.

	_	_	Economic
Impact Type	Employment	Labor Income	Output
Direct Effect	2,300	\$139,973,000	\$337,800,000
Indirect Effect	470	\$22,493,000	\$62,745,000
Induced Effect	<u>830</u>	\$33,026,000	<u>\$107,848,000</u>
Total Effect	3,600	\$195,493,000	\$508,394,000

Source: IMPLAN

Economic Benefits Once Operating & Stabilized: The Wave

As is the case with short term benefit from construction, significant recurring economic benefits are estimated to accrue from the project as well once it is operational. On an ongoing basis, 1,600 direct jobs are estimated to be created from the project, translating into 2,000 total jobs. Over \$50.8 million in labor income is expected to be generated each year as a result of the development of The Wave.

Impact Type	Employment	Labor Income	Economic Output
Direct Effect	1,600	\$33,519,000	\$88,967,000
Indirect Effect	200	\$8,680,000	\$30,441,000
Induced Effect	<u>200</u>	\$8,630,000	\$28,184,000
Total Effect	2,000	\$50,828,000	\$147,592,000

Source: IMPLAN

City Select Tax Revenue Generation from Wave Once Stabilized

While the IMPLAN model provides an estimate of fiscal impacts, IMPLAN strongly suggests that the fiscal impacts be estimated separate and distinct from IMPLAN based upon project and local knowledge. Our estimates of fiscal benefits to the City from taxable sales are highlighted in the table below (*rounded to the nearest \$,000). We estimate over \$5.94 million in local non-ad valorem tax being generated by The Wave project each year.

	Taxable Sales*	City: Sales/Admis. Prepared Food Rate*	City: Sales/Admissions/ Prepared Food Tax*	Bus Lic. Tax Rate	Business License Tax*	Total*
Entertainment Venue Tickets	\$10,142,000	10.0%	\$1,014,000	0.20%	\$20,000	\$1,034,000
Entertainment Venue F&B	\$3,078,000	6.5%	\$200,000	0.20%	\$6,000	\$206,000
Entertainment Venue - Other	\$834,000	1.0%	\$8,000	0.20%	\$2,000	\$10,000
Cinema	\$5,910,000	10.0%	\$591,000	0.20%	\$12,000	\$603,000
Cinema Concessions	\$4,742,000	6.5%	\$308,000	0.20%	\$10,000	\$318,000
Retail - Restaurant	\$33,715,000	6.5%	\$2,192,000	0.20%	\$67,000	\$2,259,000
Retail - Non-Restaurants	\$25,130,000	1.0%	\$251,000	0.20%	\$50,000	\$301,000
Other Gated Entertainment	\$5,500,000	10.0%	\$550,000	0.20%	\$11,000	\$561,000
Office	\$60,000,000	0.0%	-	0.58%	\$348,000	\$348,000
Surf Park	\$5,130,000	5.0%	\$257,000	0.36%	\$19,000	\$276,000
Surf Park Food & Beverage	\$294,000	6.5%	\$19,000	0.20%	\$1,000	\$20,000
Surf Park Ancillary Revenue	\$574,000	1.00%	<u>\$6,000</u>	0.20%	\$1,000	<u>\$7,000</u>
Total	\$155,049,000		\$5,396,000		\$547,000	\$5,943,000

Annual City Property Tax Revenue Generation from Wave Once Stabilized

Primarily driven by an analysis of taxable values of comparable projects (on a use-by-use basis) and adjusted for two years of growth, we estimate The Wave will generate upwards of \$222.2 million in taxable value translating into annual real estate taxes of over \$2.2 million. Given the design, mixed use nature of the project, location, and expected high quality of construction the project should be valued at or near the top of the comparable set of properties in the City.

Use	Estimated Taxable Value	Annual Real Estate Tax
Entertainment Venue	Tax Exempt	
Parking	Tax Exempt	
Retail (Includes Cinema)	\$65,468,400	\$656,321
Office	\$33,474,900	\$335,600
Surf Park	\$24,990,000	\$250,525
Residential	\$83,855,000	\$840,600
Common Areas	\$14,400,000	\$144,360
Annual Real Estate Taxes	\$222,188,200	\$2,227,400



Displacement & Economic Impact Assessment The Wave In Context of Oceanfront Resort District Virginia Beach

July, 2018



Residential & Office Assessment The Wave Virginia Beach

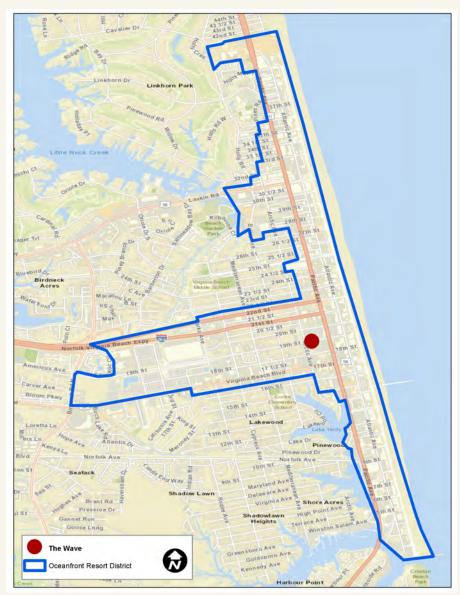
July, 2018

VIRGINIA BEACH DOME SITE

The proposed Wave development (Dome site) is located within the City of Virginia Beach's Oceanfront Resort District (outlined in blue in the map to the right). The property is generally located several blocks off the beach primarily between Pacific Avenue and Baltic Avenue east-to-west and 18th and 20th streets north-to-south. The property was subject to an RFP and Wave VB & Venture Realty Group were the selected development partners for the project. The developer and the City are currently negotiating a development agreement.

Lambert Advisory (Lambert) has completed a feasibility assessment of the potential of developing the residential and office components of The Wave.

This report provides a summary of our findings.



SECTION ONE

ECONOMIC & DEMOGRAPHICS CONTEXT

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LAMBERT ADVISORY

DATA GUIDED STRATEGY

DEMOGRAPHIC SNAPSHOT: 2010 & 2016

VIRGINIA BEACH & SURROUNDING CITIES

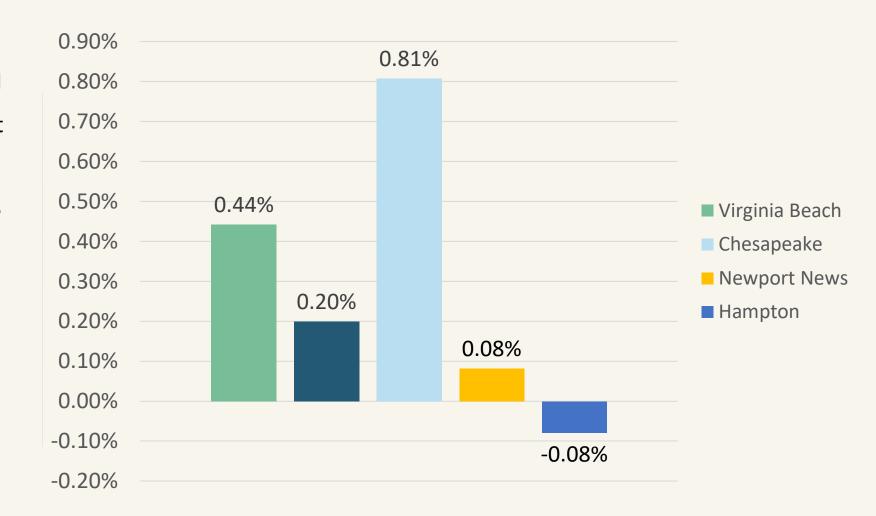
From a regional perspective Virginia Beach is larger, growing faster than most of the surrounding communities, is generally wealthier, and continues to be well positioned to capture growth derived from regional economic expansion.

	Virginia Beach	Norfolk	Chesapeake	Newport News	Hampton
Total Population Census ACS 2016	449,733	245,724	233,194	181,606	136,789
2010 Population	437,994	242,803	222,209	180,719	137,436
Households ACS 2016	167,509	87,367	82,573	69,247	53,656
2010 Households	163,944	85,061	78,778	70,653	53,283
Avg. HH Size ACS 2016	2.6	2.5	2.7	2.5	2.5
Median Household Income Census ACS 2016	\$67,719	\$45,268	\$69,978	\$50,089	\$49,890
Per Capita Income Census ACS 2016	\$33,250	\$25,450	\$30,764	\$25,520	\$25,943
Owner Occupied Households % Census ACS 2016	63.2%	42.8%	70.1%	49.4%	56.2%
Renter Occupied Households % Census ACS 2016	36.8%	57.2%	29.9%	50.6%	43.8%

REGIONAL MUNCIPAL ANNUAL POPULATION GROWTH RATE

2010 - 2016

Annual population growth of Virginia Beach has been the second highest among surrounding cities at 0.44% yearly over the past six years, gaining nearly 12,000 people or an average of 2,000 people per year. Only a much smaller Chesapeake is growing at a faster pace.



DEMOGRAPHIC SNAPSHOT: 2010/2016

VIRGINIA BEACH & SURROUNDING CITIES

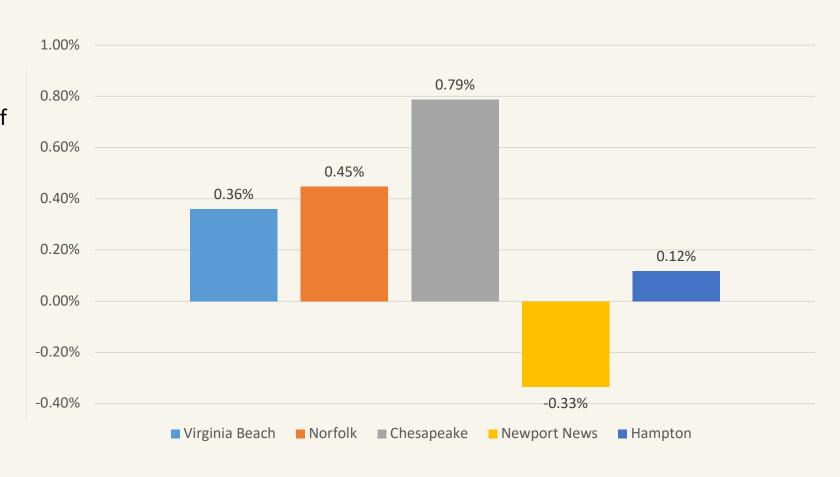
Virginia Beach's median age is comparable to surrounding cities (35.4 years old) with the exception of Norfolk which has a median age more than 5 years younger. The largest cohort is in the 35-54 range (26.5%). Population over 65 and under 19 are likewise proportionally similar to the overall region. Given the wide range of working age households (over 75%), there are a variety of housing typologies which are in demand in the City.

	Virginia Beach	Norfolk	Chesapeake	Newport News	Hampton
Median Age Census ACS 2016	35.4	30.2	36.7	32.9	35.6
Under 19	25.3%	24.4%	27.0%	27.1%	24.9%
20-34	24.3%	33.2%	20.6%	26.0%	24.2%
35-54	26.5%	22.2%	28.0%	24.3%	24.3%
55 – 65	11.6%	10.3%	12.5%	11.0%	12.8%
65+	12.3%	9.9%	11.9%	11.7%	13.7%

Source: ACS 2016 6

AVERAGE ANNUAL HOUSEHOLD GROWTH RATE 2010 - 2016

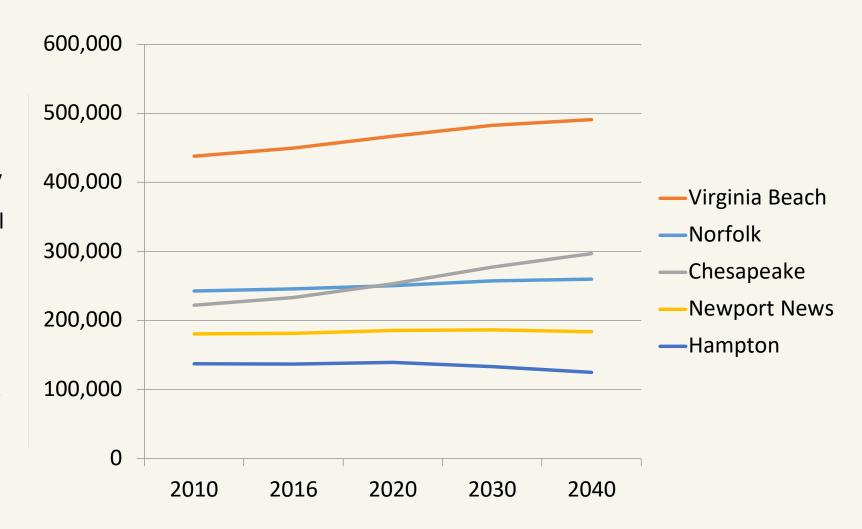
From 2010 – 2016, Virginia Beach gained nearly 3,500 households over the 6 year period. The steady growth of the City continues to drive year round demand for housing and commercial activity in the City although the City is growing at a slightly slower pace than Norfolk and the entire Hampton Roads region is growing slower than Chesapeake



VIRGINIA BEACH AND SURROUNDING CITIES HISTORICAL AND FORECAST POPULATION

2010 - 2040

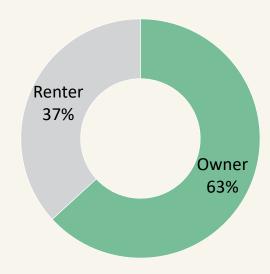
Based upon projections developed by the University of Virginia, the population of Virginia Beach is projected to increase by 0.38% annually through 2040, or roughly 53,060 in total from 2010 to 2040 (1,768 average/yr.). This is slightly slower than the 2,000 people the City added over the past six years but still indicative of strong future growth.



HOUSING TENURE - VIRGINIA BEACH

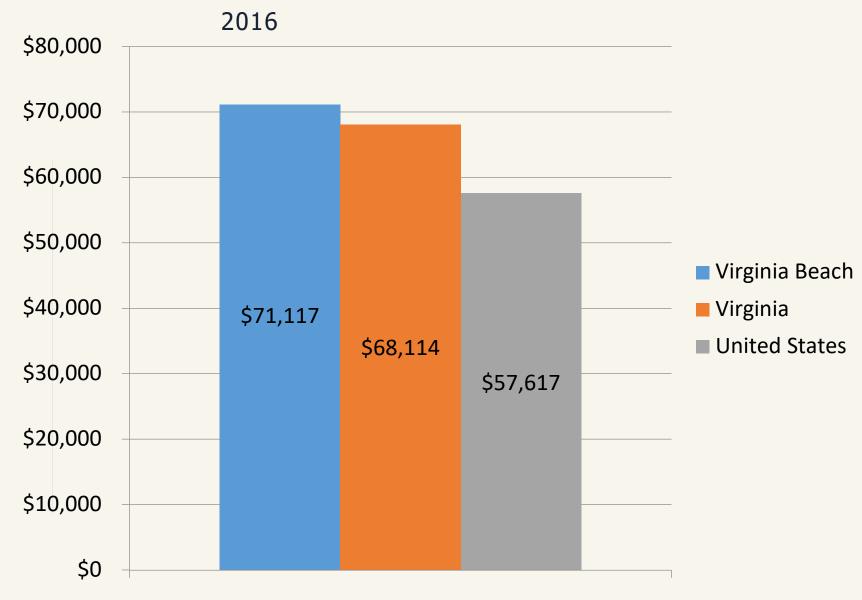
2016

While Virginia Beach has a high proportion of homeowners (63%), renters continue to make up a significant minority of households (37%).



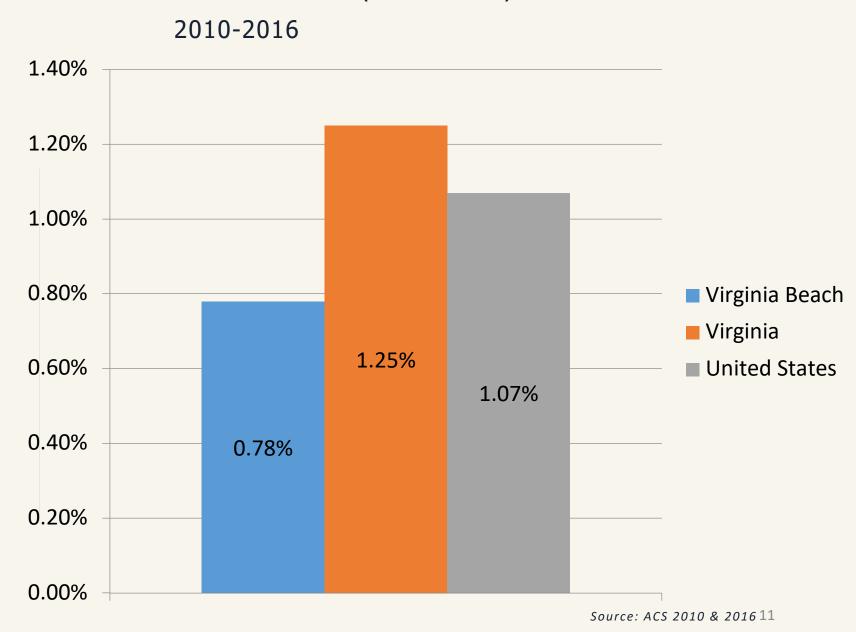
Virginia Beach has substantially higher median household incomes when compared to the nation as a whole and higher household incomes when compared to the State. This is despite the fact that the northern counties in Virginia include three of the richest counties in the United States when measured against the more than 3,000 counties nationwide skewing the State's median significantly higher than would otherwise be the case.

MEDIAN HOUSEHOLD INCOME



ANNUAL MEDIAN HOUSEHOLD INCOME (NOMINAL) GROWTH

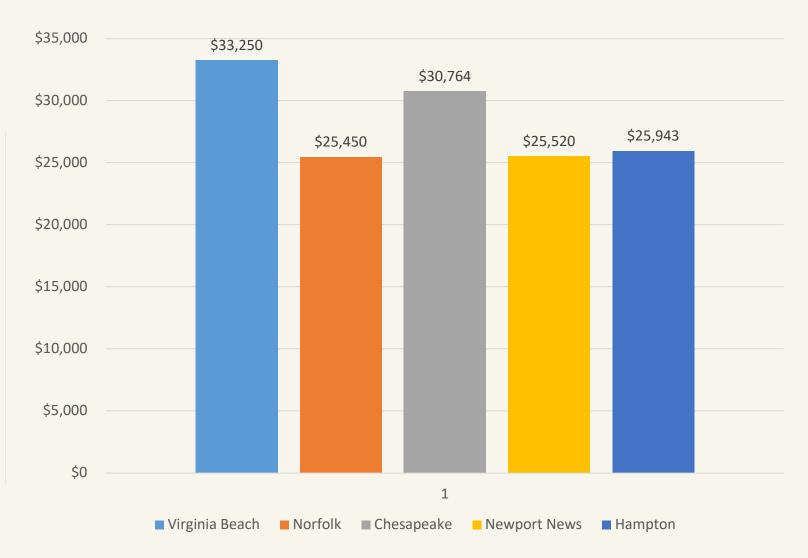
While median household incomes are higher than for the nation and State, median household income grew in the City since 2010 at a slower rate than the nation and State as a whole. This has implications for the long term rate of increase in housing cost.



PER CAPITA INCOME

2016

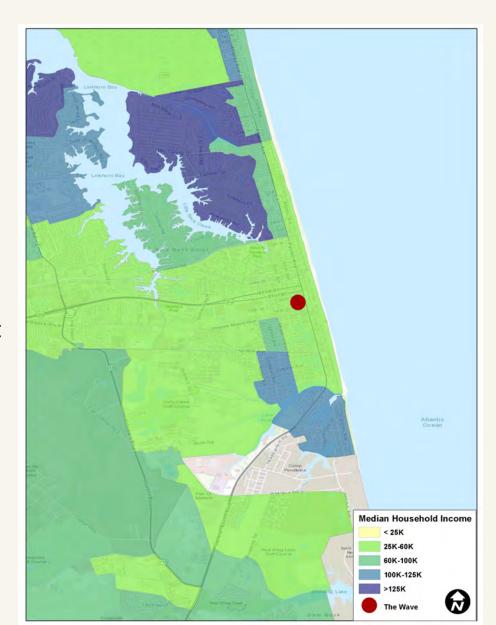
On a per capita basis, Virginia Beach has the highest per capita income in the region by nearly \$2,500. This is one core measure of a household's flexible disposable income in relation to other households in the same region.



Source: ACS 2016 12

MEDIAN HOUSEHOLD INCOME BY BLOCK GROUP ACS 2016

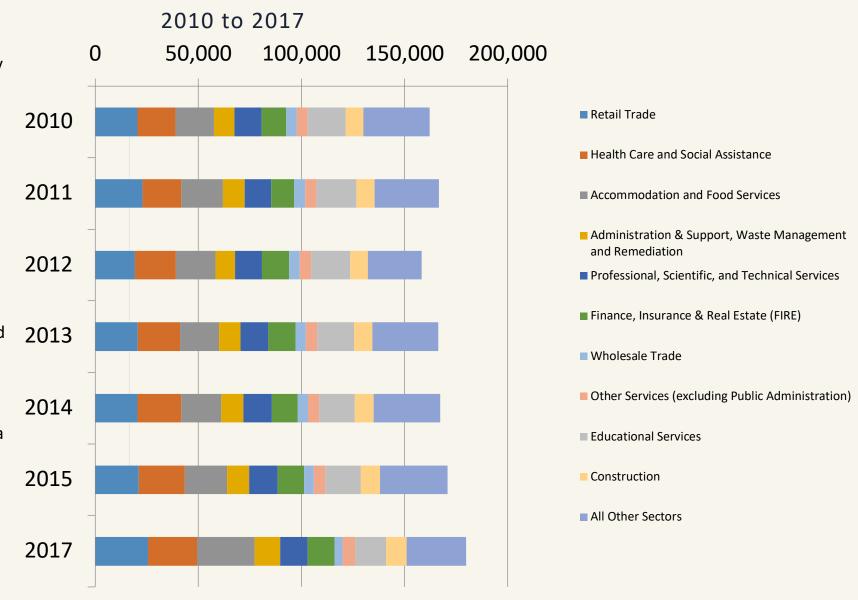
Although the Wave sits in an area which has traditionally had more modest incomes, pockets of higher household income are dispersed around coastal areas. While new housing investment in the Vibe and Beach Districts is clearly influencing this dynamic, the impact of this new investment is not showing up in the broader demographic data yet. As a result, we had to complete research to determine housing prices and rents to better understand the current dynamics in the housing market which surround the Wave



Source: ACS 2016 14

VIRGINIA BEACH EMPLOYMENT

Employment growth in Virginia Beach varied greatly dependent upon the sector. between 2010 and 2017. Health Care and Social Assistance, Accommodation & Services, Finance Insurance and Real Estate, Retail Administration & Support, and Construction experienced growth but Wholesale Trade, Education, Professional Technical Services, and Other sectors either saw very slow growth or actual decline. This has implications for housing and office demand as certain employment growth sectors tend to pay lower wages than those which experienced a decrease, and the level of growth in a narrow band of business services and professional sectors which drive the office market is central to understanding current and future trends in office demand



VIRGINIA BEACH OFFICE EMPLOYMENT PROJECTIONS

2017 - 2024

While growth was reasonably slow between 2010 and 2017, based upon data from the State of Virginia, growth in the sectors which drive office employment citywide are projected to experience reasonably steady growth between 2017 to 2024 increasing by **3,420** jobs over the next 7 years or 489 jobs per year.

	Financial and Insurance	ROOL Higtoto	Professional, Scientific, and Technical Services	Total	Average Annual Change	Average Annual Growth %
2017	8,331	4,700	13,308	26,339		
2024	9,413	5,310	15,036	29,759	489	1.76%

Source: Virginia Employment Commission, Economic Information & Analytics, Long Term Industry and Occupational Projections, 2014-2024., Virginia Employment Commission, Quarterly Census of Employment and Wages, Lambert Advisory

ECONOMIC & DEMOGRAPHIC HEADLINE FINDINGS

- The City continues to grow at a steady pace of nearly 1,800 residents a year based upon projections by the University of Virginia and will continue to demand new housing units, both for-sale and for-rent.
- Household incomes in the City are higher than both the state and nation as a whole and are among the highest in the region. To the extent that new households in the City are similar to those who already live in Virginia Beach (and there is no reason to believe they won't be) there will continue to be strong absorption of single family homes and luxury apartments. More specific estimates of housing demand are provided in the following sections.
- While growth in employment was quite modest between 2010 and 2015, citywide office employment alone is projected to increase by 3,420 jobs over the next 7 years. This will drive new demand for office space in the City.

SECTION TWO

COMPETITIVE HOUSING MARKET ASSESSMENT

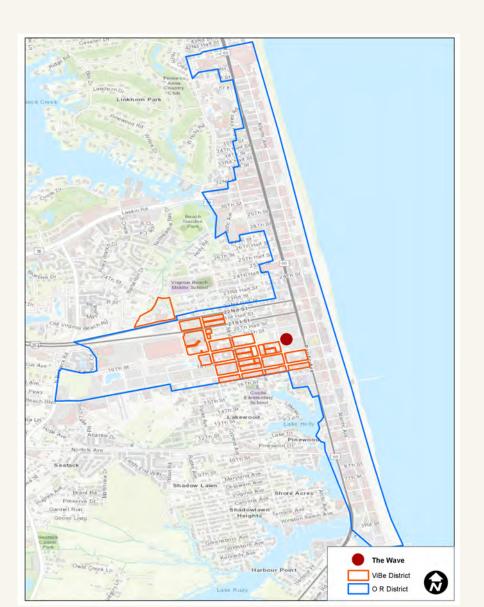
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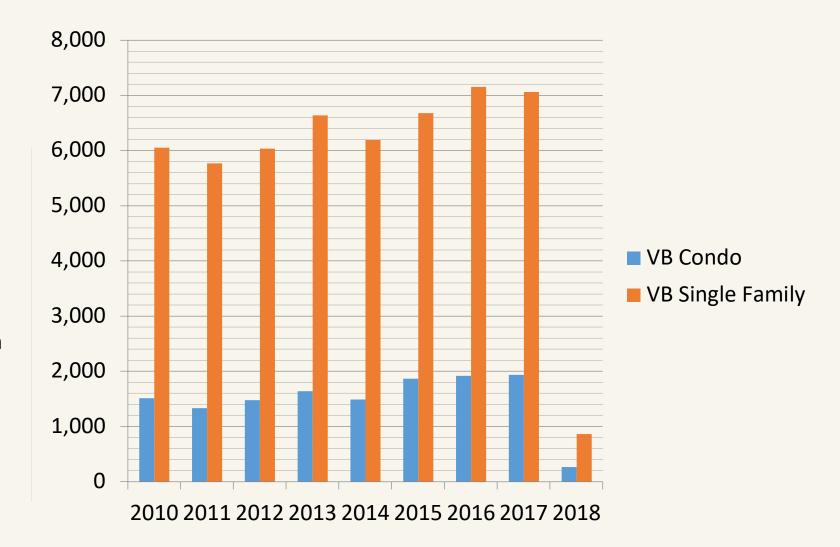
VIRGINIA BEACH RESIDENTIAL SALES SUBMARKETS

The Wave is located in the Oceanfront Resort District and Immediately Adjacent to the ViBe Creative District.



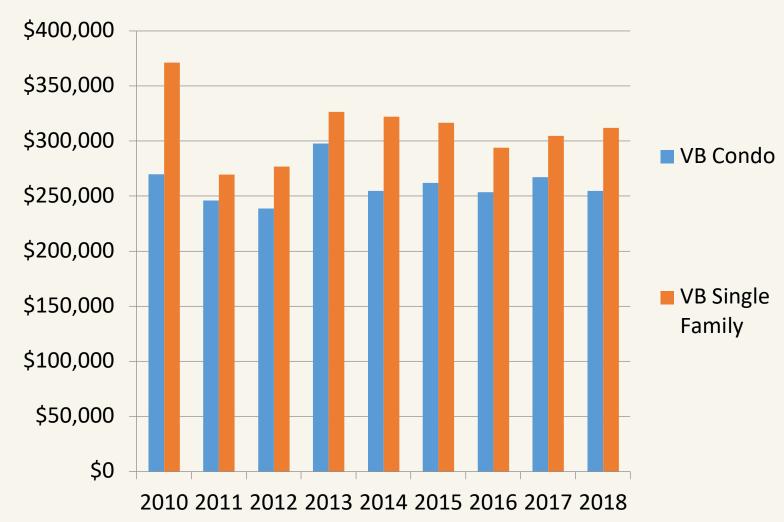
VIRGINIA BEACH CONDO AND SINGLE FAMILY HOME SALES VOLUME 2010-2018

From 2010 to 2017 there has been an average 6,450 of single family homes sold annually in Virginia Beach and an average of 1,647 condos sold. Despite significant economic growth over the 2010 to 2017 period, sales volumes have not fluctuated as dramatically when compared to other major markets across the Mid Atlantic and Southeastern U.S.



VIRGINIA BEACH CONDO AND SINGLE FAMILY HOME AVERAGE SALES PRICE TRENDS 2010-2018

Citywide, average single family home sales in Virginia Beach since 2013 have generally stayed within a narrow band between \$300,000 and \$350,000. Likewise, condominium sales have stayed between \$250,000 and \$300,000 over the same period. While Virginia Beach did not suffer from the deep declines in sales prices or volumes during the last recession, it also has not experienced the runup in sales price growth consistent with the broader economic climate. Virginia Beach has proven itself to be a stable housing market throughout this entire decade to date.



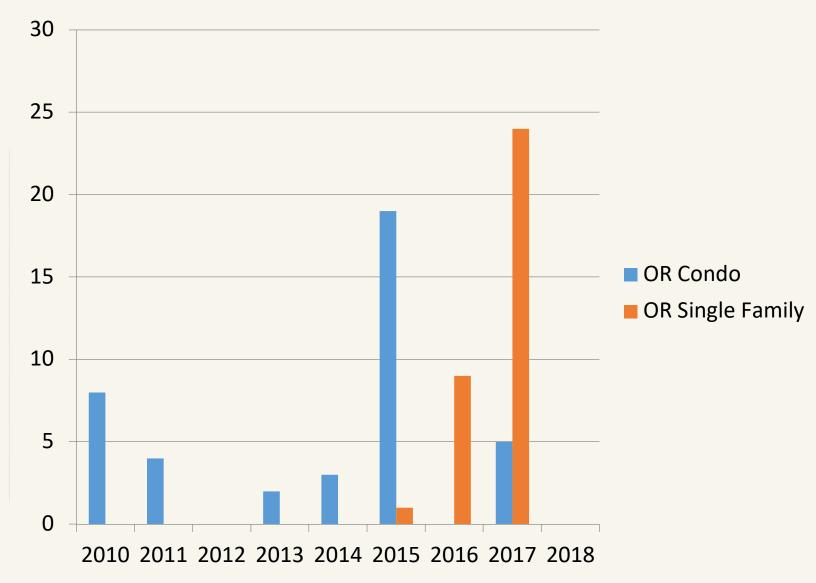
Source: Virginia Beach GIS Parcel Data Note: Sales below \$25,000 were not included in analysis.

Sales in 2018 are through March.

Note: Single Family home sales for 2018 in the Oceanfront Resort district averaged over \$2.5m but there were only 2 qualified sales so this data was removed.

OCEANFRONT RESORT DISTRICT CONDO AND SINGLE FAMILY HOME NUMBER OF UNITS BUILT 2010-2018

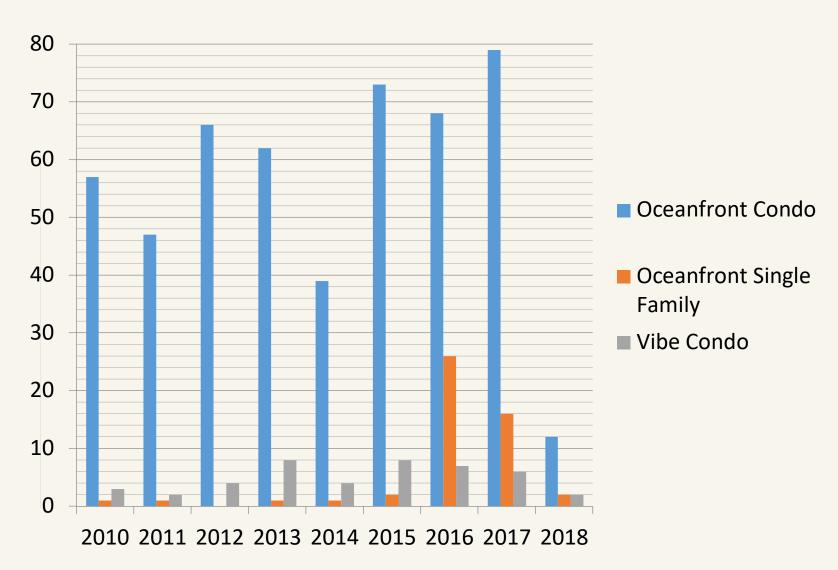
As it relates to for-sale residential development within the Oceanfront Resort District, the adjacent submarket to The Wave, between 2010 and 2018 there were a modest 41 condo units and 34 single family homes constructed in the District. A very small number of these (5) are located within the ViBe District.



Source: Virginia Beach GIS Parcel Data Note: Sales below \$25,000 were not included in analysis. Sales in 2018 are through March.

OCEANFRONT RESORT AND VIBE DISTRICT CONDO AND SINGLE FAMILY HOME SALES VOLUME 2010-2018

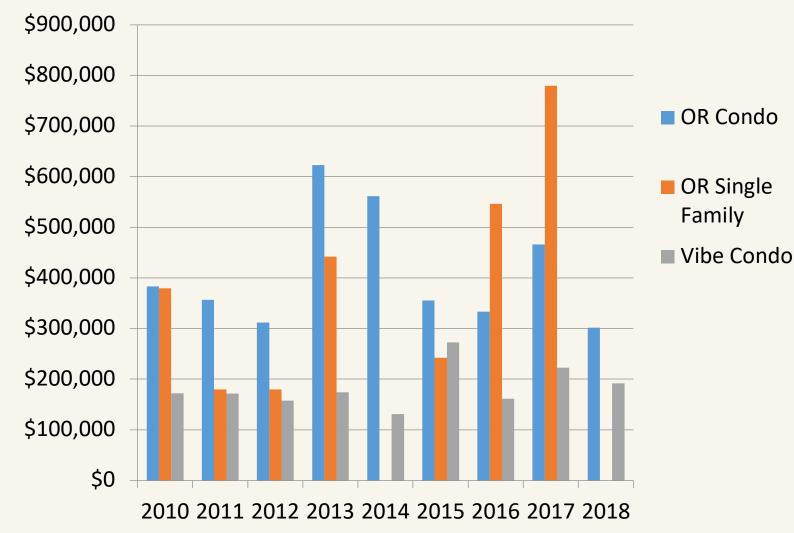
Between 2010 and 2018, The
Oceanfront Resort District has
averaged 61 existing condo and 6
existing single family home sales
per year. The market is modest in
size but sales have been fairly
steady, particularly since 2015



Source: Virginia Beach GIS Parcel Data Note: Sales below \$25,000 were not included in analysis. Sales in 2018 are through March.

OCEANFRONT RESORT AND VIBE DISTRICT CONDO AND SINGLE FAMILY HOME AVERAGE SALES PRICE TRENDS 2010-2018

After extracting the only two 2018 qualified sales in the Oceanfront Resort District which averaged \$2.5 million, the Oceanfront Resort District saw an average single family home price of \$393,000 while condo sales average \$411,000 during the same period. However, there has been significant fluctuation from year-to-year since the beginning of the decade. The ViBe District condominium sales averaged \$184,000.



Source: Virginia Beach GIS Parcel Data Note: Sales below \$25,000 were not included in analysis.

Sales in 2018 are through March.

Note: Single Family home sales for 2018 in the Oceanfront Resort district averaged over \$2.5m but there were only 2 qualified sales so this data was removed.

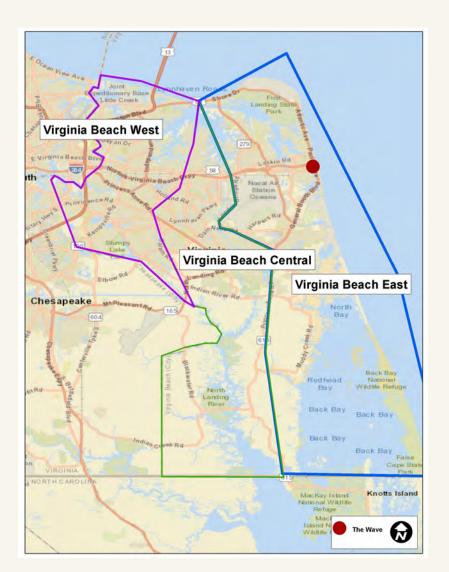
OCEANFRONT RESORT DISTRICT RESIDENTIAL FOR-SALE MARKET HIGHLIGHTS

There have been 41 mostly low density condominium units built since 2010 in the Oceanfront Resort District. The condominium market continues to be very limited, although given the strength of the rental market we expect that in the near future there will be increasing market pressure for new for-sale condominium product in the District. This is particularly the case since The Oceanfront Resort District saw an average price of \$411,000 between 2010 and 2017 among new and existing condominium sales on 61 average sales per year. Currently, there are seven (7) new low density 2-3 unit condominium (duplex and townhouse) housing projects being constructed in the Oceanfront Resort District. The average asking price for these new reasonably large units (average of 2,245 square feet) is \$568,000 or an average of \$253 per sq. ft. In terms of more modest priced and sized product, a single townhouse development with six units is selling for \$390,000 at \$243 per sq. ft.

Given condominium pricing, our demand estimates as detailed in a section below, and the strength of the luxury rental market, we believe there is a near to mid-term opportunity to support the development of new stacked condominium product within the District within a well designed and positioned mixed use project.

VIRGINIA BEACH RENTAL HOUSING SUBMARKETS

Virginia Beach is broken into three rental submarkets. The Wave (Dome) site is located in the Easternmost submarket.



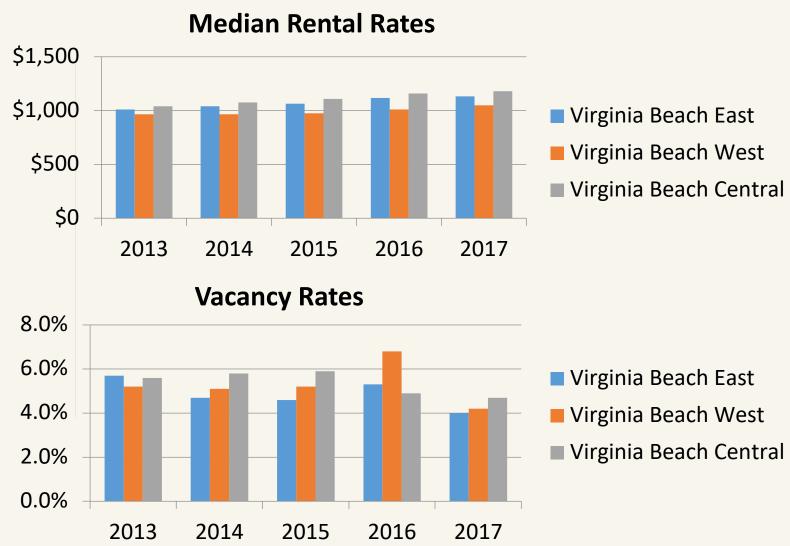
Source: CBRE 27

VIRGINIA BEACH- SUBMARKET RENTAL HOUSING TRENDS (RATES, VACANCY)

2013 to 2017

Rental rates have been on an upward trajectory trend in Virginia Beach East with a 1.4% growth in the last year.

Vacancy rates in the Virginia Beach
East submarket have fluctuated a
bit, but have remained the lowest
among the submarkets since at
least 2014. Today, and despite the
introduction of new product,
vacancies are less than 4% in the
Eastern submarket.



VIRGINIA BEACH EAST OVERALL SUBMARKET TRENDS AND STATISTICS

2016-2017

Virginia Beach East has 8,361 total rental units. Between 2016 and 2017 Virginia Beach East saw a decline in vacancy rates in all unit types and the growth in rental rates with one bedroom units experiencing the largest growth in rent at 3.8%.

30+ year old multifamily developments hold 70% of the units in the submarket, but as would be expected, have the lowest average rent. While newer multifamily developments, 1-5 years old, have the highest average rent they also have a bit higher vacancy rate than the average at 5.9%. However, this vacancy rate is substantially lower than historical averages and is indicative of a very tight rental market

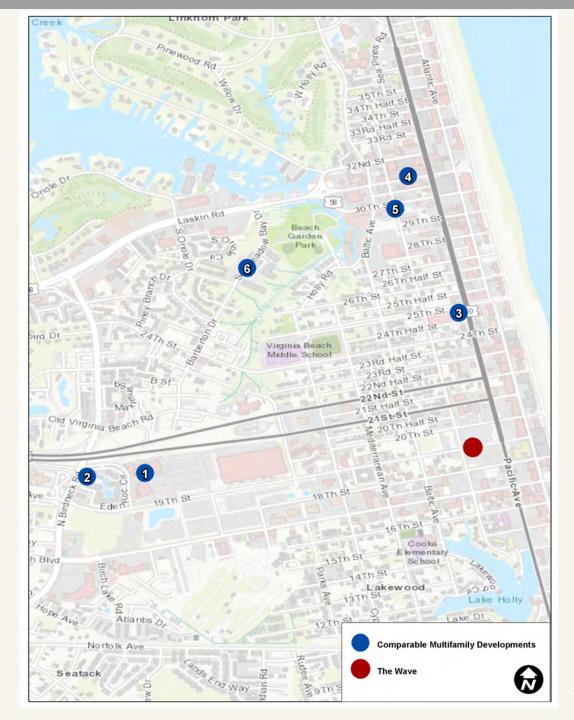
Unit Typ	e Trends				
Туре	Vacancy 2016	Vacancy 2017	Avg. Rent 2016	Avg. Rent 2017	Rent Growth
One	5.4%	4.4%	\$989	\$1,027	3.8%
Two	5.6%	3.9%	\$1,130	\$1,131	0.1%
Three	4.4%	3.7%	\$1,316	\$1,347	2.4%
Overall	5.3%	4.0%	\$1,116	\$1,132	1.4%

Multi Fan	nily Age				
Age of Built	% of Market	Vacancy	Avg. Rent	Avg. SF	Rent SF
1-5 Years	4.0%	5.9%	\$1,687	963	\$1.75
6-15 Years	8.0%	6.7%	\$1,512	1,139	\$1.33
16-30 Years	17.0%	2.8%	\$1,141	867	\$1.32
30+Years	71.0%	3.9%	\$1,051	994	\$1.06

Source: CBRE 29

SELECT COMPARABLE MULTI-FAMILY COMMUNITY SURVEY

Lambert surveyed six (6) existing multifamily developments in the area in proximity to The Wave site which range in size from 35 to 236 total units All were constructed after 2001 with the newest constructed in 2016. The six developments have a total 996 units with an average occupancy of 94.3%



SELECT COMPARABLE MULTIFAMILY COMMUNITIES

Map #	Name	# Apts	Year Built	Occupancy
1	Indigo 19	196	2014	
2	South Beach Apartments	212	2001	
3	Aqua on 25th	147	2016	
4	The Summer House	178	2012	
5	315 Beach Place	35	2014	
6	Saltmeadow Bay Apt and Townhome	236	2003	

SURVEY OF SELECT MULTIFAMILY COMMUNITIES

In Proximity to Wave Site

Of the Nearly 1,000 units added since 2001, most of the units are configured in 4 to 5 story buildings with an average of 194 units each (net of of the 35 unit 315 Beach Place). While rents in the table below are reflective of all of the competitive developments (net of 315 Beach Place), rents for the newest product built in 2016 are exceeding an average \$2,100 +/mo. and depending upon the unit type, between \$1.52 to \$2.26 per square foot.

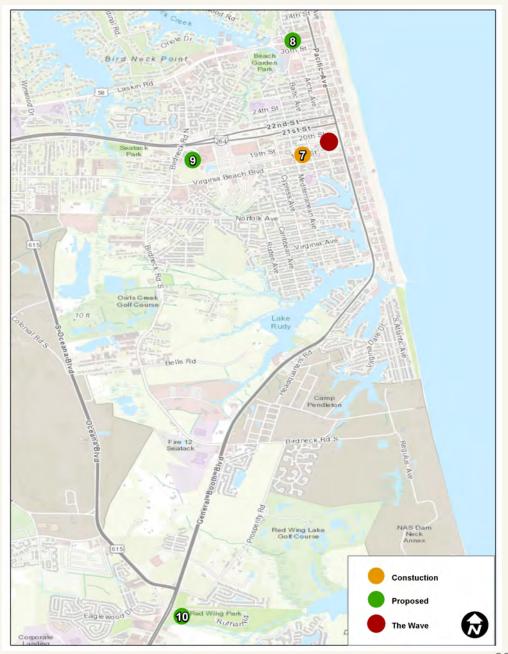
Unit						
Type (961 units)	Mix	Sq. Ft Weighted Avg.	hly Rent ated Avg.	Rent per Sq. Ft. Weighted Avg.		
Studio	1.6%	545	\$ 1,200	\$	2.20	
1 bedroom	37.9%	739	\$ 1,527	\$	2.07	
2 bedrooms	52%	1,219	\$ 1,910	\$	1.57	
3 bedrooms	8.5%	1,534	\$ 2,451	\$	1.60	

Source: Lambert Survey 32

SUBSTANTIAL NUMBER OF MULTIFAMILY UNITS IN PLANNING

No surprising given the strength of the rental market, there are a substantial number of units in planning In proximity to the Wave site.

Map	Project	Total Units	Comments
7	Seaside Harbor	78	Affordable housing in construction based on income levels. 19 Units for families with disabilities (\$400/1 bed to \$535/3 bed) 1-3 bedroom apartments.
8	Old Beach Village	300	Low-rise, market rate Construction TBD
9	Montage Resort	115	Mixed use, market rate Construction TBD
10	Dam Neck	600	Garden style, market rate Construction TBD



Source: Lambert Advisory, Virginia Beach, CBRE³³

SECTION TWO

HOUSING DEMAND ANALYSIS

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DATA GUIDED STRATEGY

STRENGTH OF EAST VIRGINIA BEACH DEMOGRAPHICS VS. VIRGINIA BEACH 2016

Lambert developed a forward looking estimate of the demand for housing in the East Virginia Beach submarket. The submarket currently comprises 28.4% of all Virginia Beach households with 64.4% of all East Virginia Beach households having household incomes above \$50,000, the lower threshold for current market rate rents in the market.

Demand Profile	Virginia Beach	East Virginia Beach
Est. Population (2017)	449,733	120,820
Est. Households (2017)	167,509	47,647
% E VB of Virginia Beach HH's		28%
% of HH Income > \$50,000	65.3%	64.4%

Source: ACS 2016 35

East Virginia Beach Net New Rental Housing Demand Projections 10 year Period

Based upon University of Virginia population growth projection and Lambert extrapolation of housing demand, the East Virginia Beach submarket area is estimated to have demand for 600-700 net new market rate multifamily rental units over the next 10 years. This assumes modest increase in renter occupied housing over current levels.

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	Change
Total Households	47,646	47,827	48,009	48,191	48,374	48,558	48,743	48,928	49,114	49,300	49,488	1,842
% HH w/Income > \$50K (Future Demand)	65.0%	65.0%	65.0%	65.0%	65.0%	65.0%	65.0%	65.0%	65.0%	65.0%	65.0%	
No. HH with Income > \$50,000	30,970	31,088	31,206	31,324	31,443	31,563	31,683	31,803	31,924	32,045	32,167	1,197
% Renter Occupied	38.0%	38.0%	38.0%	38.0%	38.0%	38.5%	38.5%	38.5%	38.5%	38.5%	38.5%	
Total Demand for New MF Dwelling Units	11,769	11,829	11,889	11,950	12,011	12,073	12,135	12,196	12,259	12,321	12,384	615
Net New MF Dwelling Units		60	61	61	61	62	62	62	62	62	63	
Cumulative		60	120	181	242	304	366	427	490	552	615	

SECTION TWO

HOUSING CONCLUSIONS

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DATA GUIDED STRATEGY

HOUSING CONCLUSIONS & WAVE OPPORTUNITY

We believe an opportunity exists to develop for-sale condominium product in the District and on the Wave site. However, given the fact that the Wave is going to be built on leased land, the significant challenges to marketing condominium product on ground leases strongly suggests that a rental development should be considered.

Given the estimated demand over the next four to five years, strong location of The Wave, and integrated mixed use nature of the project, the planned 473 units at the property is a reasonably sized program particularly if the delivery of the units can be phased in over several years as the project progresses. While none of the market rate developments we have noted as planned are currently in construction, to the extent that a large number of these units begin construction prior to the permitting of The Wave, absorption, rates and vacancy at the Wave will be impacted. As a result, speed in approving and developing the site is of significant value.

We estimate that The Wave multifamily development can achieve rental rates in excess of \$2.00 per square foot on average by 2021, with a average rental unit of between 1,000 and 1,100 square feet. However, we recommend designing a modestly large 1 bedroom (700-800 square feet) unit and modestly smaller 2 bedroom (1,100 to 1,200 square feet) than existing newer product in the market, particularly given the fact that the Wave given its location will lend itself well to seasonal rental where families will pay a premium rent for a bit more roomy 1-bedroom but will also tolerate a more efficiently designed 2 bedroom given the shorter term nature of their stay.

SECTION THREE

COMPETITIVE OFFICE MARKET

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LOCAL AND REGIONAL OFFICE MARKETS

For our office analysis there were three distinct geographies that underlie our assessment:

- Hampton Roads MSA (the overall market);
- The City of Virginia Beach; and,
- The Oceanfront Resort District.

City of Virginia Beach **Hampton Roads MSA**

Note: Virginia Beach office market statistics are based upon historical data reports from Cushman and Wakefield and Old Dominion University, the E. V. Williams Center for Real Estate and Economic Development.

OFFICE MARKET SNAPSHOT 2017 Q4

Hampton Roads MSA and Virginia Beach

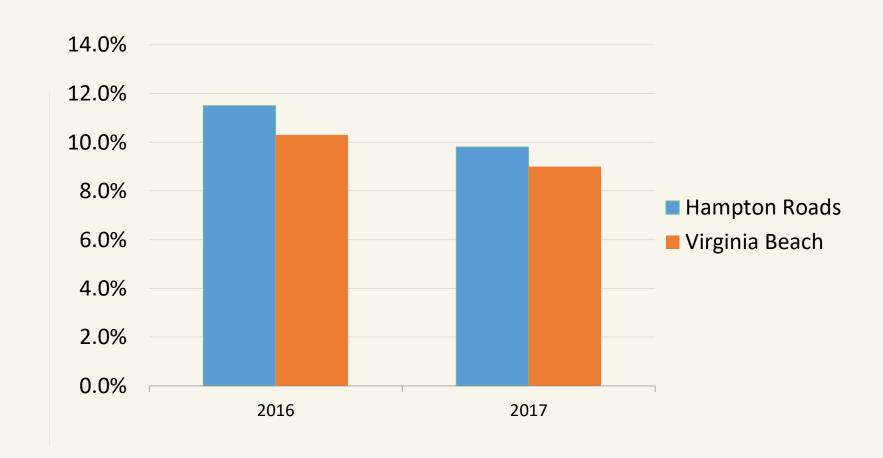
To place the regional and local market into context, the office inventory in Virginia Beach comprises 27% of all office space in the Hampton Roads MSA, with nearly equivalent occupancy rates and lease rates between the region and City which are less than \$1.00 per square foot apart.

	Total Inventory Sq. Ft.	Avg. Vacancy Rate	Gross Avg. Lease Asking Rate \$/SF/YR
Hampton Roads MSA Overall Market	40,392,373	9.8%	\$17.67
Virginia Beach	11,070,313	9.0%	\$18.59

OFFICE VACANCY RATE % TRENDS: 2016-2017

Hampton Roads MSA and Virginia Beach

The occupancy trend has been very positive in the Virginia Beach market over the past several years. Although vacancy rates are now holding at 9.0 percent, based upon discussions with industry representatives, Virginia Beach vacancy was notably higher (14-17%) between 2010-2015. Overall, Virginia Beach reported net absorption of 158,000 square feet in 2017.



Source: Cushman and Wakefield and Old Dominion University, the E. V. Williams Center for Real Estate and Economic Development.

GROSS AVG. ASKING LEASE RATES (\$/SF/Yr.) RATES: 2016-2017

Hampton Roads MSA and Virginia Beach

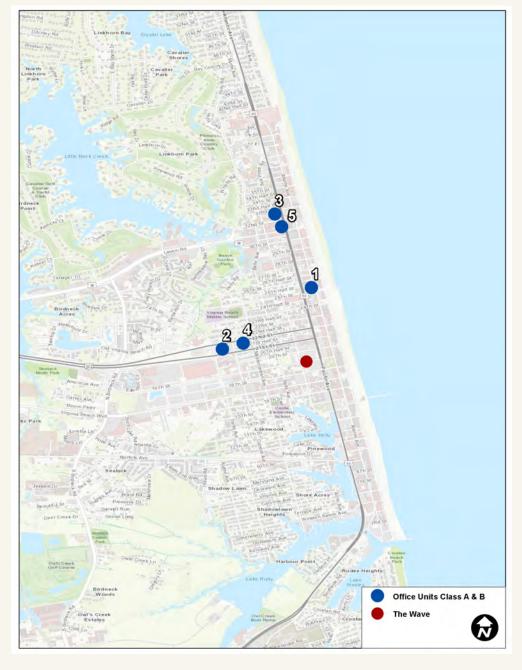
As of the 4th Quarter 2017, the average rental rate for office space in Virginia Beach was \$18.59/sq. ft. but has sharply climbed from approximately \$15.00 in 2012.



Source: Cushman and Wakefield and Old Dominion University, the E. V. Williams Center for Real Estate and Economic Development.

SELECT COMPARABLE OFFICE BUILDINGS OCEANFRONT RESORT DISTRICT

Lambert surveyed 5 comparable office developments in the Virginia Beach Oceanfront District. The buildings total 293,000 sq. ft., with an average gross lease rate of between \$18-26 per square foot. However, larger Class A buildings have significantly higher lease rates and occupancies than the smaller Class B buildings. Three Class A buildings with 244,000 of 293,000 total square feet surveyed are all nearly 100 percent occupied and have lease rates above \$23 per square foot on average. While even the highest rents found in Class A buildings in the District are not yet at a point were new construction is financially supported, the lack of vacancy and limited scope of the competitive market is likely to allow a new building delivered in 2-3 years time, achieve significantly higher rates as long as demand continues to grow.



SELECT COMPARABLE OFFICE BUILDINGS IN THE EAST, OCEANFRONT RESORT DISTRICT

Virginia Beach

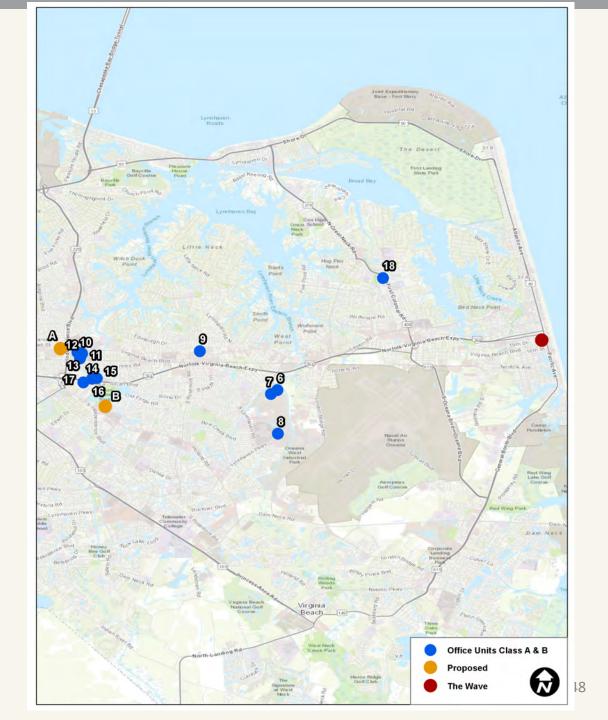
Map#	Address	Yr. Built	Total Sq. Ft.	Class	Stories	Total Available Space (SF)	Percent Leased	Avg Asking Rate	Туре	Term
1	2500 Atlantic Ave	2008	30,000	B,B+	2					
2	2101 Parks Ave	1990	98,078	Α	14					
3	3200 Pacific Ave	1964	18,840	В	2					
4	600 22nd St	2008	83,859	Α	5					
5	300 32nd St (Summer House)	2012	61,980	Α	5					
Totals			292,757			32,760	88.75%	\$23.70		

SELECT COMPARABLE OFFICE BUILDINGS IN CENTRAL AND WESTERN VIRGINIA BEACH

To obtain a sense of the broader competitive market given the limited supply in the District,
Lambert also surveyed 13 comparable Class A and B office developments in Central and Western Virginia Beach.

The buildings totaled 1,319,000 sq. ft. of space with an average occupancy of 87% and \$23.70 average lease rate. However, Class A buildings which comprise over 86% of the total inventory surveyed have an \$24.60 average lease rate and an equivalent occupancy to all of the buildings surveyed.

Two proposed developments are planed with a total 360,200 sq. ft. of additional space.



SELECT COMPARABLE OFFICE BUILDINGS IN CENTRAL AND WESTERN VIRGINIA BEACH

Map #	Address	Yr. Built	Total Sq. Ft.	Class	Stories	Total Available Space (SF)	Percent Leased	Avg Asking Rate	Туре	Term
6	582 Lynnhaven Pkwy	2005	23,408	В	4	Space (Si)	Leasea	Nate	Type	Term
7	613 Lynnhaven Pkwy	1985	63,236	С	2					
8	780 Lynnhaven Pkwy	1988	79,000	Α	4					
9	397 Little Neck Rd	1985	50,000	В	3					
10	4525 Main St	2014	239,000	Α	15					
11	283 Constitution Dr	1983	129,456	Α	11					
12	222 Central Park Ave	2002	332,951	Α	21					
13	4500 Main St	2008	116,500	Α	6					
14	4525 Columbus St	1996	20,000	В	2					
15	277 Bendix Rd	2002	92,000	Α	5					
16	4429 Bonney Rd	2005	92,000	Α	5					
17	4525 South Blvd	1997	61,594	Α	3					
18	1157 First Colonial Rd	2001	20,000	В	3					
Totals /Avg			1,319,145			172,975	87%	\$23.66		
А	4656 Virginia Beach Blvd	Proposed	300,200	Α	22					
В	500 Studio Dr	Proposed	60,000	Α	2					49

OFFICE BROKER INTERVIEWS

Lambert surveyed a number of office brokers in the market to get a real time sense of trends in leasing and market dynamics. These interviewed indicated the following:

- Rental rates in overall Virginia Beach steadily rose since 2012 to a high in 2016. The beginning of 2017 saw a downturn but the remainder of the year saw positive growth. 2018 has continues this positive growth.
- While the market overall is still a bit soft, there is a marked trend of improvement.
- The oceanfront area has a limited supply of class A office space. Expectation that demand will continue as the oceanfront (leases) are cheaper than Virginia Beach CBD and the "quality of life" factors are significant for office employees and tenants.
- The beach area could use more professional office product. The brokers expect new office development to occur
 in the beach area over the next few years as it is becoming a more attractive place and know office submarket.
 Leases are trending upwards but continue to be cheaper than central Virginia Beach.

OFFICE HEADLINES & WAVE OPPORTUNITY

- While the overall market is leasing under \$20/sf and vacancy in excess of 9%, Class A space we surveyed is significantly outperforming the market with a similar occupancy but \$24.60/sf rents on average.
- Class A office buildings surveyed (244,000 sf) in and surrounding the Oceanfront District performed well with average lease rates of \$24.70 but unlike Class A Space in the city at large, are almost fully leased.
- Broker interviews indicate that the market continues to strengthen and the past two years have been particularly strong.
- As shown in the table to the right, we estimate citywide demand of 500,000-600,000 square feet over the next 5+ years
- We believe a Class A office development of in excess of 100,000 square feet at the Wave can be absorbed over a two year time frame and lease space at an effective average gross lease rate of \$26-28 per square foot modified gross given the mixed use nature of the site, newness, and quality of proposed construction.

	Moderate	Upper
Total Office Employment Growth Projection (through 2023)	2,375	2,750
Avg. Sq. Ft. Per Office Employee	<u>225</u>	<u>225</u>
Total Office Demand (Sq. Ft.) 2018-2023	534,400	618,800



TECHNICAL MEMORANDUM

DATE: Tuesday, August 07, 2018

TO: Ronald H. Williams, Jr. – City of Virginia Beach; Bruce Berlin – Venture Realty Group

CC: City of Virginia Beach; The Wave Development Team; John Judge - DESMAN

FROM: Andrew S. Hill, Director of Consulting Services – DESMAN, Inc.

PROJECT: Virginia Beach Dome Redevelopment PROJECT #: 20-18126.00-3

RE: Shared Parking Analysis Report

DEVELOPMENT PROGRAM

Working off the most recent development plan provided by the developer (Venture Realty Group), DESMAN developed a summary of the proposed development program. This program includes the following:

- 84,550 square feet of standard retail (e.g. Old Navy);
- 35,000 square feet of specialty grocery (e.g. Whole Foods);
- 35,300 square feet of fine/casual dining (e.g. Ruth Chris);
- 4,300 square feet of fast/casual dining (e.g. Sweetgreen);
- 4,300 square feet of café/take-out restaurant (e.g. Starbucks);
- 35,000 square feet of Museum/Interactive Entertainment (e.g. National Geographic);
- A 800-seat high-end Cineplex (e.g. IPic);
- 10,800 square feet of Lifestyle/Entertainment (e.g. Brooklyn Boulders);
- 15,000 square feet of Experiential Retail (e.g. Bridge);
- 426 residential units;
- 152,850 square feet of General Office;
- A 236,000 square foot Surf Park;
- A 3,500-seat Performing Arts Venue; and -
- 1,935 on-site parking spaces.

The proposed development program was five separate blocks. A listing of land use assumptions per the provided development program is included as an Appendix to this analysis. An image showing the program provided is included as *Figure 1* on the following page. It should be noted that there is a slight discrepancy between the parking supply totals listed on this illustration and those shown in the prior accounting. This exists because DESMAN did not include public on-street parking spaces as part of the planned parking supply to support the project.



Figure 1: Site Plan



130M SURF PARK GROUND FLOOR PLAN









SHARED USE BACKGROUND

At the request of the City of Virginia Beach and Venture Realty Group, DESMAN prepared the following Shared Parking model specific the subject development.

Shared Parking is a methodology for calculating the parking demands of a proposed project developed by the Urban Land Institute (ULI) in collaboration with the Institute of Transportation Engineers (ITE) and the International Council of Shopping Centers (ICSC). This methodology is a departure from the standard zoning ordinance method of calculating required parking which is to apply a parking demand ratio (or parking requirement per local code or ordinance) to each component within a project, sum the total of all demands and build against this figure. This traditional methodology treats parking demand as a fixed, unwavering phenomenon and, as result, often results in the provision of parking supply greater than the true need of the development.

Shared Parking methodology is a statistical modeling approach that incorporates real-world data on how land uses actually behave and simulates how parking demand for each land use in a development waxes and wanes during the course of day and year. This methodology allows the planner to accurately determine the need for the development as an organic whole, rather than an assembly of disparate parts. The result is provision of a parking supply to support the project which is adequate to meet the project's needs without building excess parking spaces.

Shared Parking models are comprised of industry standard base parking demand ratios, adjusted to reflect for variations in demand specific to each project's composition and locality, as well as fluctuations in demand according to time of day and year.

Base parking demand ratios are developed through the long-term study of stand-alone land uses (i.e. office buildings, retail stores, hotel, etc.) with their own dedicated parking facilities. Researchers perform occupancy counts at different times of day, different days of the week, and different times of the year, to isolate the busiest hour of the busiest weekday and/or weekend day annually. Once the peak hour is isolated, researchers divide the number of vehicles parked by the key driving element in each land use, such as the number of hotel rooms or total gross leasable square footage of the building. This division renders a parking demand ratio; the mathematic expression of the number of cars parked at the busiest hour of the busiest day related to the land use's key driver.

The Urban Land Institute (ULI), the Institute of Transportation Engineers (ITE), the International Council of Shopping Center (ICSC), the International Parking Institute (IPI), the National Parking Association (NPA), the American Planning Association (APA) and other agencies gather and consolidate these individual studies into peer-reviewed, statistically reliable resources for application in planning studies, such as this one. Where possible, these were used in the model developed to assess this project.

However, not all planned land uses had corresponding demand ratios published in a peer-reviewed publication. Where these ratios were not available, DESMAN applied the following methodology as follows:

Specialty Grocery: Specialty Groceries such as Whole Foods, Trader Joes, Wegman, Publix, etc.
rose in popularity in the early 2000's. While a fairly common tenant in high-end mixed-use
projects, these land uses have yet to be subject of an extensive, peer-reviewed study endorsed
by ULI, ITE, etc. Members of the DESMAN team performed a study of fourteen separate Specialty



Groceries in operation in the northeastern U.S. from 2003 to 2006 to establish the demand ratios and presence factors used in this model. This data has not been peer reviewed or published to date and is proprietary.

- Museum/Interactive: Typically, parking demand for museums and similar land uses is calculated against staffing estimates and projected daily visitor volumes. These statistics were unavailable for this project and none of the industry standard publications provided a recommended base demand ratio for this land use. Working with parking statistics compiled through prior studies executed for the Smithsonian Institution, the Boston Museum of Science, the New England Aquarium, and the Boston Children's Museum, DESMAN was able to identify peak demand periods for each institution from actual vehicle counts and compare those to the gross floor area for each institution to render base demand ratios. Following standard methodology, DESMAN adopted a ratio reflecting the 85th percentile of the range of ratios and subdivided these ratios according to employee population versus daily visitor volumes to determine the distribution within the base demand ratio between customers and employees.
- High End Cinema: For this land use, DESMAN used the standard base demand ratio recommended by the Urban Land Institute, modified slightly to reflect differences in demand and presence noted through longitudinal studies of ten 'luxury' cineplexes in the eastern U.S. conducted between 2003 and 2009. The data from these studies is proprietary to American Multi-Cinema, Inc. (AMC), but the demand ratios and presence factors calculated from this data belong to DESMAN, which applied them to this analysis.
- Lifestyle/Entertainment: Based on the developer's description of this land use, DESMAN determined that the most applicable demand ratio from existing literature was for a Health Club as defined and presented in the Urban Land Institute's Shared Parking: 2nd Edition. This decision was validated by discussions with managers for a chain of indoor climbing centers in New England¹, as well as observations of parking demand accumulation during the course of a typical weekday and Saturday in May 2018. The management at these centers also provided proprietary staffing and membership statistics from calendar 2016 and 2017 which were used to develop hourly and seasonal presence factors.
- Experiential Retail: No parking or transportation resource has a base parking demand ratio associated with this land use, so DESMAN applied the highest range ratio recommended in **Shared Parking:2**nd Edition for retail stores.
- Apartments: Based on conversations with the developer and the City, DESMAN assumed each residential unit would have one dedicated parking space. Based on these seem conversations, DESMAN assumed that demand for parking would average 1.0 space/unit for Studio apartments, 1.25 spaces/unit for One-Bedroom apartments, 2.0 spaces/unit for Two-Bedroom apartments, and 2.5 spaces/unit for Three-Bedroom apartments. Based on the mix of proposed units, this translated into an averaged ratio of 1.12 spaces/unit for Studio and One-Bedroom apartments, and 2.06 spaces/unit for apartments with multiple bedrooms. These factors were applied to the model as one reserved space per unit for all residential units, 0.12 spaces/unit (unreserved) for single-bed units, and 1.06 spaces/unit (unreserved) for multi-bed units, plus 0.05 spaces/unit for all units for guest parking (unreserved).

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¹ Name withheld per terms of Non-Disclosure Agreement and/or at the request of the company.



- Surf Park: This land use was the most challenging as it is not only without precedent within the
 parking industry, but does not exist in an observable form in the continental U.S. Given that there
 was no historical data to calculate a based parking demand ratio from, DESMAN used projected
 visitor statistics as provided by the developer to calculate an average based demand ratio for the
 land use. DESMAN then contacted subject matter experts to gain their insight and
 recommendations regarding both base demand ratios and presence factors including:
 - O A publicly traded partnership² which owns and operates multiple amusement parks, outdoor water parks, indoor water parks, and hotels in the U.S. and Canada. The company provided some limited data regarding parking, staffing figures, and visitors volumes under a proprietary agreement to aid in estimating base parking demand and presence according to time of day and year.
 - A family-run waterpark located in New England³. The park has been in continuous operation for over 20 years under the same family and hosts roughly 100,000 visitors annually. This contributor provided some limited data regarding parking, staffing figures, and visitors volumes under a proprietary agreement to aid in estimating base parking demand and presence according to time of day and year.
 - Based in Cohoes, New York, Aquatic Development Group (ADG) is one of the leading wave generation and water park design/build firm in the United States. ADG did not provide any data for this study, but did provide counsel and insight on the water park industry as DESMAN was developing its model.
 - The World Waterpark Association (WWA), founded in 1982, is an international not-for-profit member-based trade association that serves waterparks, aquatic venues and spray parks of all shapes and sizes based on Overland Park, Kansas. The WWA is governed by a volunteer Board of Directors consisting of 14 waterpark owners, operators, suppliers and developers and has approximately 1,200 members. The WWA did not provide any data for this study, but did provide counsel and insight on the water park industry as DESMAN was developing its model.

DESMAN applied the base demand ratios, shown in *Table 1* on the next page to the proposed program.

Adjustments to base demand ratios were applied to reflect the actual conditions in the project site. These applied factors included adjustments to reflect choice of transportation mode, internal rates of capture, and other local factors.

Mode adjustments reflect the percentage of users expected to drive themselves to a project, versus arriving by other means. The most recent [2016] American Community Survey (ACS) covering the City of Virginia Beach and administered by the US Census Bureau, reported that 81.9% of the local populace drive themselves to work in a personal vehicle; the remainder either carpooled (8.7%), rode transit (0.9%), worked from home (4.0%), walked (2.6%) or commuted by other means (1.9%). This is the basis for DESMAN's assumptions regarding mode adjustment (.82) specific to the project for employees.

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² Name withheld per terms of Non-Disclosure Agreement and/or at the request of the company.

³ Name withheld per terms of Non-Disclosure Agreement and/or at the request of the company.



Table 1: Base Parking Demand Ratios

Land Use	User Group	Weekday	Weekend	Unit	Source
Standard Retail	Customer	2.90	3.20	/ksf GLA	Shared Parking: 2nd Edition. Washington DC: ULI-The Urban Land Institute, 2005, p.11
	Employee	0.70	0.80	/ksf GLA	Shared Parking: 2nd Edition. Washington DC: ULI-The Urban Land Institute, 2005, p.11
Specialty Grocery	Customer	3.50	3.70	/ksf GLA	DESMAN Inc. (proprietary information from 14 specialty grocer stores in New England, 2003-2006).
	Employee	0.60	0.50	/ksf GLA	DESMAN Inc. (proprietary information from 14 specialty grocer stores in New England, 2003-2006).
Fine/Casual Dining	Customer	12.00	19.00	/ksf GLA	Parking Generation: 4th Edition. Washington DC: ITE - Institute of Transportation Engineers , 2010
	Employee	2.20	3.70	/ksf GLA	Parking Generation: 4th Edition. Washington DC: ITE - Institute of Transportation Engineers , 2010
Fast Casual Dining	Customer	15.00	17.00	/ksf GFA	Parking Generation: 4th Edition. Washington DC: ITE - Institute of Transportation Engineers , 2010
	Employee	2.40	3.40	/ksf GFA	Parking Generation: 4th Edition. Washington DC: ITE - Institute of Transportation Engineers, 2010
Café/Take Out	Customer	12.00	16.00	/ksf GLA	Parking Generation: 4th Edition. Washington DC: ITE - Institute of Transportation Engineers, 2010
	Employee	2.50	2.85	/ksf GLA	Parking Generation: 4th Edition. Washington DC: ITE - Institute of Transportation Engineers , 2010
Museum/Interactive	Customer	3.68	3.19	/ksf GFA	DESMAN Inc. (proprietary information from operation studies of the Smithsonian, NEAQ, MoS, BCM).
	Employee	0.65	0.56	/ksf GFA	DESMAN Inc. (proprietary information from operation studies of the Smithsonian, NEAQ, MoS, BCM).
High End Cinema	Customer	0.19	0.26	/seat	DESMAN Inc (proprietary information from AMC, 2003-2009) and Shared Parking: 2nd Edition., 2005, p.11
	Employee	0.01	0.01	/seat	DESMAN Inc (proprietary information from AMC, 2003-2009) and Shared Parking: 2nd Edition., 2005, p.11
Lifestyle/Entertainment	Customer	6.60	5.50	/ksf GLA	Shared Parking: 2nd Edition. Washington DC: ULI - Urban Land Institute, 2005, p.11 and other contributors.
	Employee	0.40	0.25	/ksf GLA	Shared Parking: 2nd Edition. Washington DC: ULI - Urban Land Institute, 2005, p.11 and other contributors.
Experiential Retail	Customer	3.20	3.60	/ksf GLA	Shared Parking: 2nd Edition. Washington DC: ULI-The Urban Land Institute, 2005, p.11
	Employees	0.80	0.90	/ksf GLA	Shared Parking: 2nd Edition. Washington DC: ULI-The Urban Land Institute, 2005, p.11
Apartments	Studio/1BR	0.12	0.12	/unit	DESMAN Inc.
	Multi-BR	1.06	1.06	/unit	DESMAN Inc.
	Reserved	1.00	1.00	/unit	DESMAN Inc.
	Guest	0.05	0.05	/unit	DESMAN Inc.
General Office	Visitor	0.30	0.03	/ksf GFA	Shared Parking: 2nd Edition. Washington DC: ULI - Urban Land Institute, 2005, p.11
	Employee	3.50	0.35	/ksf GFA	Shared Parking: 2nd Edition. Washington DC: ULI - Urban Land Institute, 2005, p.11
Surf Park	Visitor	1.25	1.33	/ksf GFA	DESMAN Inc. (per ADG, WWA and other contributors)
	Employee	0.05	0.08	/ksf GFA	DESMAN Inc. (per ADG, WWA and other contributors)
Performing Arts Venue	Visitor	0.30	0.33	/seat	Shared Parking: 2nd Edition. Washington DC: ULI - Urban Land Institute , 2005, p.11
	Employee	0.07	0.07	/seat	Shared Parking: 2nd Edition. Washington DC: ULI - Urban Land Institute , 2005, p.11

The 2016 American Community Survey for Virginia Beach also notes that 4% of households reported owning no vehicle, so DESMAN assumed a .96 factor for the unreserved parking demand ratios associated with single (.12 spaces/unit) and multiple (1.06 spaces/unit) bedroom apartments.

In the absence of definitive documentation regarding mode choice by customers, visitors and other discretionary users, DESMAN applied assumption based on experience with similar projects and settings and conversations with the City of Virginia Beach and the developer. These assumptions were as follows:

- Roughly 5% of shoppers, diners, cinema patrons, lifestyle/entertainment customers, office
 visitors, and performing arts event attendees would come to the project by means other than a
 single-occupant vehicle. These assumptions were vetted and validated relative to local experience
 by the City of Virginia Beach and the developer.
- Roughly one in four (25%) museum visitors would come by means other than a single-occupant vehicle, most commonly a group van, school or charter bus. This assumption was vetted and validated relative to local experience by the City of Virginia Beach and the developer.
- Roughly one in three (24%) surf park customers would come by means other than a single-occupant vehicle, most commonly a group van, school or charter bus. This assumption was vetted and validated relative to local experience by the City of Virginia Beach and the developer.

Capture adjustments - the percentage of persons already on the project site for one reason, but patronizing another business — is applied so that demand associated with one land use is not credited against another land use during the modeling process. For example, the office worker who goes to Starbucks on break does not generate any new or additional parking demand by going for a latte. If that employee's parking demand is already 'credited' to his office, the capture adjustment to Starbucks assures that his parking demand is NOT associated with the coffee shop, in essence "double counting" him. Capture adjustments can result in significant reductions in base demand ratios — depending on land use — as a substantial percentage of the patrons to a particular business can be coming from inside the project,



thereby not generating any additional parking demand. Some of these reductions will remain fairly stable, regardless of the day of week or time of day, while others will fluctuate according to time of day or day of the week. Within the proposed project site, DESMAN assumed that the largest 'captive population' would be hotel guests, area employees or residents who might also patronize retail stores, restaurants, entertainment venues, or attractions on-site without necessarily generating any additional trips or resulting parking demand.

Applied capture assumptions to this model were as follows:

- Retail: One in four (25%) retail patrons would be captive within the project or immediate surrounding area on weekdays, weekday evenings, weekends and weekend evenings, walking to the project rather than generating an additional vehicle's worth of demand.
- Grocery: One in three (33%) grocery shippers would be captive within the project or immediate surrounding area on weekdays, weekday evenings, weekends and weekend evenings, walking to the project rather than generating an additional vehicle's worth of demand.
- Fine/Casual Restaurants: One in every two (50%) of Fine/Casual diners would be captive within the project or immediate surrounding area on weekdays for lunch service, walking to the project rather than generating an additional vehicle's worth of demand. This capture rate is projected to decline during the course of the day and on evenings, when a greater share of patronage will drive to the destination from outlying areas, so DESMAN applied larger adjustments to weekday dinner service (.55), weekend lunch service (.65), and weekend dinner service (.67).
- Fast Casual Restaurants: One in every two (50%) of Fast Casual diners would be captive within the project or immediate surrounding area on weekdays for lunch service, walking to the project rather than generating an additional vehicle's worth of demand. This capture rate is projected to decline during the course of the day and on evenings, when a greater share of patronage will drive to the destination from outlying areas, so DESMAN applied larger adjustments to weekday dinner service (.60), weekend lunch service (.75), and weekend dinner service (.80).
- Café/Take-Out Restaurants: Two in every three (67%) of Café/Take-Out Restaurant customers would be captive within the project or immediate surrounding area on weekdays for lunch service, walking to the project rather than generating an additional vehicle's worth of demand. This capture rate is projected to decline during the course of the day and on evenings, when a greater share of patronage will drive to the destination from outlying areas, so DESMAN applied larger adjustments to weekday dinner service (.40), weekend lunch service (.55), and weekend dinner service (.60).
- Museum/Interactive: DESMAN assumed that roughly 20% of museum visitors would be tourists staying in hotels in the surrounding area who would elect to leave their vehicle at the hotel and walk to the site, thereby not generating demand associated with this land use during their visit.
- Cineplex: One in four (25%) movie goers would be captive within the project or immediate surrounding area on weekdays, weekday evenings, weekends and weekend evenings, walking to the project rather than generating an additional vehicle's worth of demand.
- Lifestyle/Entertainment: One in four (25%) patrons would be captive within the project or immediate surrounding area on weekdays, weekday evenings, weekends and weekend evenings, walking to the project rather than generating an additional vehicle's worth of demand.



- Surf Park: DESMAN anticipates this land use will be a major regional, and possibly national, draw to the project; a 'destination' feature that individuals will plan a trip to Virginia Beach around, due to its uniqueness. This assumption was affirmed by conversations with ADG and the WWA, which indicate similar observations with comparable developments. As a result, DESMAN assumed a significant portion of the patronage will be staying at area hotels and walking or ride-sharing (i.e. taxi, Uber, Lyft, shuttle, etc.) to the project. On weekdays, DESMAN assumed roughly one-third (34%) of patrons would be captive in the area, resulting in an applied factor of .66. On weekday evenings and weekends, the percentage of captive users was expected to increase to 50%.
- Performing Arts Venue: DESMAN anticipates this land use will also be a major regional, and possibly national, draw to the project; a 'destination' feature that individuals will plan a trip to Virginia Beach around, depending on the artists performing. This assumption was based on work performed in similar locations with comparable element. As a result, DESMAN assumed a significant portion of the patronage will be staying at area hotels and walking or ride-sharing (i.e. taxi, Uber, Lyft, shuttle, etc.) to the project. DESMAN assumed roughly one-half (50%) of patrons would be captive in the area, resulting in an applied factor of .50. In addition, and based on conversations with the developer, DESMAN assumed that roughly 40% of the venue's employees would be area residents who would walk, bike, take transit, or catch a ride to the project or park off-site during performance.

A summary of applied adjustments to base demand ratios are shown in *Table 2*, next page.

The final factor comprising the model is the adjustment to reflect for variances for temporal and seasonal *presence*. *Presence* is the expression of parking demand for specific users and land uses according to time of day and time of year. Presence is expressed as a percentage of peak potential demand modified for time of day or year.

For example, the model projects that a 35,000 square feet of specialty grocery has a peak parking demand equal to 95-96 parking spaces. However, this demand is influenced by the hours of operation. At 3:00 AM, the grocery store is unlikely to project any parking demand at all. Additionally, parking demand is influenced by the time of year. Traditionally, grocery stores are busiest during the winter holidays and slowest in in the summer, when more people eat out. Therefore, so is parking demand associated with the grocery store.

Presence becomes a significant factor in a mixed-use environment like The Wave because it allows different land uses to share the same parking supply. For example, the office component planned within the project will exert the greatest demand on weekdays mornings outside traditional holiday and vacation periods, when most employees are present. Inversely, the Performing Arts Venue will have the highest attendance during summer evenings, when the office is largely empty. This interplay of complimentary land use allows the development of a parking supply which can serve both populations congruently.

Variations for time of day and time of year for weekends (Saturdays) were also calculated for The Wave and applied to the model. The majority of presence adjustments were taken from <u>ULI's Shared Parking:</u> <u>2nd Edition</u>, except where otherwise noted. Presence factors were applied to projections of gross demand and used to generate hourly parking demand projections for a typical weekday and weekend day throughout the year. DESMAN used these projections to isolate the peak hour in each month. The applied presence adjustments for time of year are shown below in *Table 3* on the next page, and time of day presence adjustments are included as *Tables 4* (weekdays) and *5* (weekends) on the following pages.



Table 2: Applied Mode and Capture Adjustments

							WEE
	DAYTIME	(6:00 A	M - 4:59	PM)			
		Base	Modal	Capture	Local	Project	
Land Use	User Group	Ratio	Adj.	Adj.	Adj.	Ratio	Unit
Standard Retail	Customer	2.90	0.95	0.75	1.00	2.07	/ksf GLA
	Employee	0.70	0.82	1.00	1.00	0.57	/ksf GLA
Specialty Grocery	Customer	3.50	0.95	0.67	1.00	2.23	/ksf GLA
	Employee	0.60	0.82	1.00	1.00	0.49	/ksf GLA
Fine/Casual Dining	Customer	12.00	0.95	0.50	1.00	5.70	/ksf GLA
	Employee	2.20	0.82	1.00	1.00	1.80	/ksf GLA
Fast Casual Dining	Customer	15.00	0.95	0.50	1.00	7.13	/ksf GFA
	Employee	2.40	0.82	1.00	1.00	1.97	/ksf GFA
Café/Take Out	Customer	12.00	0.95	0.33	1.00	3.76	/ksf GLA
	Employee	2.50	0.82	1.00	1.00	2.05	/ksf GLA
Museum/Interactive	Customer	3.68	0.75	0.80	1.00	2.21	/ksf GFA
	Employee	0.65	0.82	1.00	1.00	0.53	/ksf GFA
High End Cinema	Customer	0.19	0.95	0.75	1.00	0.14	/seat
	Employee	0.01	0.82	1.00	1.00	0.01	/seat
Lifestyle/Entertainment	Customer	6.60	0.95	0.75	1.00	4.70	/ksf GLA
	Employee	0.40	0.82	1.00	1.00	0.33	/ksf GLA
Experiential Retail	Customer	3.20	0.95	0.75	1.00	2.28	/ksf GLA
	Employees	0.80	0.82	1.00	1.00	0.66	/ksf GLA
Apartments	Studio/1BR	0.12	0.96	1.00	1.00	0.12	/unit
	Multi-BR	1.06	0.96	1.00	1.00	1.02	/unit
	Reserved	1.00	1.00	1.00	1.00	1.00	/unit
	Guest	0.05	0.95	1.00	1.00	0.05	/unit
General Office	Visitor	0.30	0.95	1.00	1.00	0.29	/ksf GFA
	Employee	3.50	0.82	1.00	1.00	2.87	/ksf GFA
Surf Park	Visitor	1.25	0.66	0.66	1.00	0.54	/ksf GFA
	Employee	0.05	0.82	1.00	1.00	0.04	/ksf GFA
Performing Arts Venue	Visitor	0.30	0.95	0.50	1.00	0.14	/seat
	Employee	0.07	0.82	0.60	1.00	0.03	/seat

DAYS							
	EVENING	(5:00 P	M - 12:00	OAM)			
		Base	Modal	Capture	Local	Project	
Land Use	User Group	Ratio	Adj.	Adj.	Adj.	Ratio	Unit
Standard Retail	Customer	2.90	0.95	0.75	1.00	2.07	/ksf GLA
	Employee	0.70	0.82	1.00	1.00	0.57	/ksf GLA
Specialty Grocery	Customer	3.50	0.95	0.67	1.00	2.23	/ksf GLA
	Employee	0.60	0.82	1.00	1.00	0.49	/ksf GLA
Fine/Casual Dining	Customer	12.00	0.95	0.55	1.00	6.27	/ksf GLA
	Employee	2.20	0.82	1.00	1.00	1.80	/ksf GLA
Fast Casual Dining	Customer	15.00	0.95	0.60	1.00	8.55	/ksf GFA
	Employee	2.40	0.82	1.00	1.00	1.97	/ksf GFA
Café/Take Out	Customer	12.00	0.95	0.40	1.00	4.56	/ksf GLA
	Employee	2.50	0.82	1.00	1.00	2.05	/ksf GLA
Museum/Interactive	Customer	3.68	0.75	0.80	1.00	2.21	/ksf GFA
	Employee	0.65	0.82	1.00	1.00	0.53	/ksf GFA
High End Cinema	Customer	0.19	0.95	0.75	1.00	0.14	/seat
	Employee	0.01	0.82	1.00	1.00	0.01	/seat
Lifestyle/Entertainment	Customer	6.60	0.95	0.75	1.00	4.70	/ksf GLA
	Employee	0.40	0.82	1.00	1.00	0.33	/ksf GLA
Experiential Retail	Customer	3.20	0.95	0.75	1.00	2.28	/ksf GLA
	Employees	0.80	0.82	1.00	1.00	0.66	/ksf GLA
Apartments	Studio/1BR	0.12	0.96	1.00	1.00	0.12	/unit
	Multi-BR	1.06	0.96	1.00	1.00	1.02	/unit
	Reserved	1.00	1.00	1.00	1.00	1.00	/unit
	Guest	0.05	0.95	1.00	1.00	0.05	/unit
General Office	Visitor	0.30	0.95	1.00	1.00	0.29	/ksf GFA
	Employee	3.50	0.82	1.00	1.00	2.87	/ksf GFA
Surf Park	Visitor	1.25	0.66	0.50	1.00	0.41	/ksf GFA
	Employee	0.05	0.82	1.00	1.00	0.04	/ksf GFA
Performing Arts Venue	Visitor	0.30	0.95	0.50	1.00	0.14	/seat
	Employee	0.07	0.82	0.60	1.00	0.03	/seat

							WE
	DAYTIME	(6:00 A	M - 4:59	PM)			
		Base	Modal	Capture	Local	Project	
Land Use	User Group	Ratio	Adj.	Adj.	Adj.	Ratio	Unit
Standard Retail	Customer	3.20	0.95	0.75	1.00	2.28	/ksf GLA
	Employee	0.80	0.82	1.00	1.00	0.66	/ksf GLA
Specialty Grocery	Customer	3.70	0.95	0.67	1.00	2.36	/ksf GLA
	Employee	0.50	0.82	1.00	1.00	0.41	/ksf GLA
Fine/Casual Dining	Customer	19.00	0.95	0.65	1.00	11.73	/ksf GLA
	Employee	3.70	0.82	1.00	1.00	3.03	/ksf GLA
Fast Casual Dining	Customer	17.00	0.95	0.75	1.00	12.11	/ksf GFA
	Employee	3.40	0.82	1.00	1.00	2.78	/ksf GFA
Café/Take Out	Customer	16.00	0.95	0.55	1.00	8.36	/ksf GLA
	Employee	2.85	0.82	1.00	1.00	2.33	/ksf GLA
Museum/Interactive	Customer	3.19	0.75	0.80	1.00	1.91	/ksf GFA
	Employee	0.56	0.82	1.00	1.00	0.46	/ksf GFA
High End Cinema	Customer	0.26	0.95	0.75	1.00	0.19	/seat
	Employee	0.01	0.82	1.00	1.00	0.01	/seat
Lifestyle/Entertainment	Customer	5.50	0.95	0.75	1.00	3.92	/ksf GLA
	Employee	0.25	0.82	1.00	1.00	0.20	/ksf GLA
Experiential Retail	Customer	3.60	0.95	0.75	1.00	2.57	/ksf GLA
	Employees	0.90	0.82	1.00	1.00	0.74	/ksf GLA
Apartments	Studio/1BR	0.12	0.96	1.00	1.00	0.12	/unit
	Multi-BR	1.06	0.96	1.00	1.00	1.02	/unit
	Reserved	1.00	1.00	1.00	1.00	1.00	/unit
	Guest	0.05	0.95	1.00	1.00	0.05	/unit
General Office	Visitor	0.03	0.95	1.00	1.00	0.03	/ksf GFA
	Employee	0.35	0.82	1.00	1.00	0.29	/ksf GFA
Surf Park	Visitor	1.33	0.66	0.50	1.00	0.44	/ksf GFA
	Employee	0.08	0.82	1.00	1.00	0.06	/ksf GFA
Performing Arts Venue	Visitor	0.33	0.95	0.50	1.00	0.16	/seat
	Employee	0.07	0.82	0.60	1.00	0.03	/seat

ENDS							
	EVENING	(5:00 P	M - 12:00	AM)			
		Base	Modal (Capture	Local	Project	
Land Use	User Group	Ratio	Adj.	Adj.	Adj.	Ratio	Unit
Standard Retail	Customer	3.20	0.95	0.75	1.00	2.28	/ksf GLA
	Employee	0.80	0.82	1.00	1.00	0.66	/ksf GLA
Specialty Grocery	Customer	3.70	0.95	0.67	1.00	2.36	/ksf GLA
	Employee	0.50	0.82	1.00	1.00	0.41	/ksf GLA
Fine/Casual Dining	Customer	19.00	0.95	0.67	1.00	12.09	/ksf GLA
	Employee	3.70	0.82	1.00	1.00	3.03	/ksf GLA
Fast Casual Dining	Customer	17.00	0.95	0.80	1.00	12.92	/ksf GFA
	Employee	3.40	0.82	1.00	1.00	2.78	/ksf GFA
Café/Take Out	Customer	16.00	0.95	0.60	1.00	9.12	/ksf GLA
	Employee	2.85	0.82	1.00	1.00	2.33	/ksf GLA
Museum/Interactive	Customer	3.19	0.75	0.80	1.00	1.91	/ksf GFA
	Employee	0.56	0.82	1.00	1.00	0.46	/ksf GFA
High End Cinema	Customer	0.26	0.95	0.75	1.00	0.19	/seat
	Employee	0.01	0.82	1.00	1.00	0.01	/seat
Lifestyle/Entertainment	Customer	5.50	0.95	0.75	1.00	3.92	/ksf GLA
	Employee	0.25	0.82	1.00	1.00	0.20	/ksf GLA
Experiential Retail	Customer	3.60	0.95	0.75	1.00	2.57	/ksf GLA
	Employees	0.90	0.82	1.00	1.00	0.74	/ksf GLA
Apartments	Studio/1BR	0.12	0.96	1.00	1.00	0.12	/unit
	Multi-BR	1.06	0.96	1.00	1.00	1.02	/unit
	Reserved	1.00	1.00	1.00	1.00	1.00	/unit
	Guest	0.05	0.95	1.00	1.00	0.05	/unit
General Office	Visitor	0.03	0.95	1.00	1.00	0.03	/ksf GFA
	Employee	0.35	0.82	1.00	1.00	0.29	/ksf GFA
Surf Park	Visitor	1.33	0.66	0.50	1.00	0.44	/ksf GFA
	Employee	0.08	0.82	1.00	1.00	0.06	/ksf GFA
Performing Arts Venue	Visitor	0.33	0.95	0.50	1.00	0.16	/seat
	Employee	0.07	0.82	0.60	1.00	0.03	/seat



Table 3: Applied Monthly Presence Factors

Land Use	User Group	January	February	March	April	May	June	July	August	September	October	November	December	Holidays
Standard Retail	Customer	56%	57%	64%	63%	66%	67%	64%	69%	64%	66%	72%	100%	80%
	Employee	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	90%	100%	90%
Specialty Grocery	Customer	95%	90%	95%	95%	100%	95%	90%	85%	90%	85%	90%	95%	100%
	Employee	100%	100%	100%	100%	100%	95%	90%	90%	95%	95%	100%	100%	100%
Fine/Casual Dining	Customer	88%	87%	96%	93%	98%	96%	99%	100%	92%	94%	91%	99%	87%
	Employee	88%	87%	96%	93%	98%	96%	99%	100%	92%	94%	91%	99%	87%
Fast Casual Dining	Customer	86%	86%	95%	93%	98%	97%	99%	100%	93%	96%	92%	98%	90%
	Employee	86%	86%	95%	93%	98%	97%	99%	100%	93%	96%	92%	98%	90%
Café/Take Out	Customer	88%	88%	99%	94%	96%	95%	100%	100%	95%	98%	93%	97%	93%
	Employee	88%	88%	99%	94%	96%	95%	100%	100%	95%	98%	93%	97%	93%
Museum/Interactive	Customer	87%	87%	94%	86%	92%	95%	97%	100%	91%	87%	81%	85%	90%
	Employee	87%	87%	94%	86%	92%	95%	97%	100%	91%	87%	81%	85%	90%
Cineplex (weekdays)	Customer	27%	21%	20%	19%	27%	41%	55%	40%	15%	15%	25%	23%	100%
	Employee	50%	50%	50%	50%	50%	75%	75%	75%	50%	50%	50%	50%	100%
Cineplex (weekends)	Customer	71%	59%	67%	58%	71%	82%	92%	75%	51%	62%	78%	67%	100%
	Employee	80%	80%	80%	80%	80%	100%	100%	90%	80%	80%	80%	80%	100%
Lifestyle/Entertainment	Customer	100%	95%	90%	85%	75%	75%	75%	70%	80%	85%	90%	95%	95%
	Employee	100%	100%	95%	80%	75%	75%	75%	80%	90%	95%	95%	100%	100%
Experiential Retail	Customer	56%	57%	64%	63%	66%	67%	64%	69%	64%	66%	72%	100%	80%
	Employees	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	90%	100%	90%
Apartments	Studio/1BR	100%	100%	100%	100%	100%	95%	90%	85%	95%	100%	95%	90%	85%
	Multi-BR	100%	100%	100%	100%	100%	95%	90%	85%	95%	100%	95%	90%	85%
	Reserved	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
	Guest	100%	100%	100%	100%	100%	95%	90%	85%	95%	100%	95%	90%	85%
General Office	Visitor	100%	100%	95%	100%	100%	95%	90%	85%	95%	100%	100%	100%	80%
	Employee	100%	100%	95%	100%	100%	95%	90%	85%	95%	100%	100%	100%	80%
Surf Park	Visitor	50%	60%	70%	80%	90%	100%	100%	100%	90%	80%	70%	60%	50%
	Employee	70%	75%	80%	85%	95%	100%	100%	100%	90%	85%	80%	75%	70%
Performing Arts Venue	Visitor	75%	80%	85%	90%	95%	100%	100%	100%	95%	90%	85%	80%	75%
	Employee	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%



Table 4: Applied Daily Presence Factors for a Weekday

Land Use	User Group	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM	10:00 PM	11:00 PM	12:00 AM
Standard Retail	Customer	1%	5%	15%	35%	65%	85%	95%	100%	95%	90%	90%	95%	95%	95%	80%	50%	30%	10%	0%
(Typical)	Employee	10%	15%	40%	75%	85%	95%	100%	100%	100%	100%	100%	95%	95%	95%	90%	75%	40%	15%	0%
Standard Retail	Customer	1%	5%	15%	30%	55%	75%	90%	100%	100%	100%	95%	85%	80%	75%	65%	50%	30%	10%	0%
(December)	Employee	10%	15%	40%	75%	85%	95%	100%	100%	100%	100%	100%	95%	95%	95%	90%	75%	40%	15%	0%
Standard Retail	Customer	1%	5%	10%	20%	40%	65%	90%	100%	100%	100%	95%	85%	70%	55%	40%	25%	15%	5%	0%
(Holidays)	Employee	10%	15%	40%	75%	85%	95%	100%	100%	100%	100%	100%	95%	95%	95%	90%	75%	40%	15%	0%
Specialty Grocery	Customer	0%	3%	23%	35%	68%	71%	80%	78%	63%	72%	85%	96%	100%	94%	71%	48%	10%	2%	0%
	Employee	5%	15%	40%	60%	75%	95%	100%	100%	95%	90%	95%	100%	100%	85%	75%	45%	15%	5%	0%
Fine/Casual Dining	Customer	0%	0%	0%	0%	15%	40%	75%	75%	65%	40%	50%	75%	95%	100%	100%	100%	95%	75%	25%
	Employee	0%	20%	50%	75%	90%	90%	90%	90%	90%	75%	75%	100%	100%	100%	100%	100%	100%	85%	35%
Fast Casual Dining	Customer	25%	50%	60%	75%	85%	90%	100%	90%	50%	45%	45%	75%	80%	80%	80%	60%	55%	50%	25%
	Employee	50%	75%	90%	90%	100%	100%	100%	100%	100%	75%	75%	95%	95%	95%	95%	80%	65%	65%	35%
Café/Take Out	Customer	5%	10%	20%	30%	55%	85%	100%	100%	90%	60%	55%	60%	85%	80%	50%	30%	20%	10%	5%
	Employee	15%	20%	30%	40%	75%	100%	100%	100%	95%	70%	60%	70%	90%	90%	60%	40%	30%	20%	20%
Museum/Interactive	Customer	0%	0%	0%	0%	27%	59%	87%	100%	92%	87%	79%	66%	41%	29%	17%	3%	0%	0%	0%
	Employee	0%	10%	20%	45%	66%	90%	100%	100%	100%	90%	80%	65%	33%	20%	10%	5%	0%	0%	0%
Cineplex	Customer	0%	0%	0%	0%	0%	0%	20%	45%	55%	55%	55%	60%	60%	80%	100%	100%	80%	65%	40%
	Employee	0%	0%	0%	0%	0%	0%	50%	60%	60%	75%	75%	100%	100%	100%	100%	100%	100%	70%	50%
Lifestyle/Entertainment	Customer	15%	25%	35%	40%	60%	80%	90%	85%	75%	60%	50%	60%	75%	90%	100%	90%	70%	50%	20%
	Employee	20%	30%	40%	60%	80%	100%	100%	100%	90%	75%	75%	75%	80%	100%	100%	100%	80%	60%	40%
Experiential Retail	Customer	1%	5%	10%	20%	40%	65%	90%	100%	100%	100%	95%	85%	70%	55%	40%	25%	15%	5%	0%
	Employees	10%	15%	40%	75%	85%	95%	100%	100%	100%	100%	100%	95%	95%	95%	90%	75%	40%	15%	0%
Apartments	Studio/1BR	100%	90%	85%	80%	75%	70%	65%	70%	70%	70%	75%	85%	90%	97%	98%	99%	100%	100%	100%
	Multi-BR	100%	90%	85%	80%	75%	70%	65%	70%	70%	70%	75%	85%	90%	97%	98%	99%	100%	100%	100%
	Reserved	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
	Guest	0%	10%	20%	20%	20%	20%	20%	20%	20%	20%	20%	40%	60%	100%	100%	100%	100%	80%	50%
General Office	Visitor	0%	1%	20%	60%	100%	45%	15%	45%	100%	45%	15%	5%	0%	0%	0%	0%	0%	0%	0%
	Employee	3%	30%	75%	95%	100%	100%	90%	90%	100%	100%	90%	50%	25%	10%	7%	3%	1%	0%	0%
Surf Park	Visitor	0%	0%	25%	50%	75%	90%	100%	100%	100%	90%	75%	60%	50%	40%	30%	10%	0%	0%	0%
	Employee	15%	30%	60%	75%	90%	100%	100%	100%	100%	100%	90%	80%	70%	60%	50%	40%	30%	15%	5%
Performing Arts Venue	Visitor	0%	0%	0%	0%	0%	0%	0%	0%	0%	5%	10%	50%	70%	90%	100%	100%	100%	80%	50%
	Employee	0%	0%	5%	5%	5%	5%	5%	5%	10%	20%	40%	60%	80%	100%	100%	100%	100%	90%	80%



Table 5: Applied Daily Presence Factors for a Weekend

Land Use	User Group	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM	10:00 PM	11:00 PM	12:00 AM
Standard Retail	Customer	1%	5%	10%	30%	50%	65%	80%	90%	100%	100%	95%	90%	80%	75%	65%	50%	35%	15%	0%
(Typical)	Employee	10%	15%	40%	75%	85%	95%	100%	100%	100%	100%	100%	95%	85%	80%	75%	65%	45%	15%	0%
Standard Retail	Customer	1%	5%	10%	35%	60%	70%	85%	95%	100%	100%	95%	90%	80%	75%	65%	50%	35%	15%	0%
(December)	Employee	10%	15%	40%	75%	85%	95%	100%	100%	100%	100%	100%	95%	85%	80%	75%	65%	45%	15%	0%
Standard Retail	Customer	1%	5%	10%	20%	40%	60%	80%	95%	100%	100%	95%	85%	70%	60%	50%	30%	20%	10%	0%
(Holidays)	Employee	10%	15%	40%	75%	85%	95%	100%	100%	100%	100%	100%	95%	85%	80%	75%	65%	45%	15%	0%
Specialty Grocery	Customer	0%	12%	37%	53%	87%	100%	95%	89%	84%	82%	75%	66%	58%	44%	21%	18%	3%	1%	0%
	Employee	10%	20%	40%	60%	80%	100%	100%	100%	100%	95%	85%	75%	75%	65%	50%	40%	20%	10%	5%
Fine/Casual Dining	Customer	0%	0%	0%	0%	0%	15%	50%	55%	45%	45%	45%	60%	90%	95%	100%	90%	90%	90%	50%
	Employee	0%	20%	30%	60%	75%	75%	75%	75%	75%	75%	75%	100%	100%	100%	100%	100%	100%	85%	50%
Fast Casual Dining	Customer	10%	25%	45%	70%	90%	90%	100%	85%	65%	40%	45%	60%	70%	70%	65%	30%	25%	15%	10%
	Employee	50%	75%	90%	90%	100%	100%	100%	100%	100%	75%	75%	95%	95%	95%	95%	80%	65%	65%	35%
Café/Take Out	Customer	5%	10%	20%	30%	55%	85%	100%	100%	90%	60%	55%	60%	85%	80%	50%	30%	20%	10%	5%
	Employee	15%	20%	30%	40%	75%	100%	100%	100%	95%	70%	60%	70%	90%	90%	60%	40%	30%	20%	20%
Museum/Interactive	Customer	0%	0%	27%	59%	87%	100%	92%	87%	79%	66%	41%	29%	17%	3%	0%	0%	0%	0%	0%
	Employee	10%	20%	45%	66%	90%	100%	100%	100%	90%	80%	65%	33%	20%	10%	5%	0%	0%	0%	0%
Cineplex	Customer	0%	0%	0%	0%	0%	0%	35%	60%	75%	80%	80%	80%	70%	80%	100%	100%	100%	85%	70%
	Employee	0%	0%	0%	0%	0%	0%	50%	60%	60%	75%	75%	100%	100%	100%	100%	100%	100%	70%	50%
Lifestyle/Entertainment	Customer	15%	25%	35%	40%	60%	80%	90%	85%	75%	60%	50%	60%	75%	90%	100%	90%	70%	50%	20%
	Employee	20%	30%	40%	60%	80%	100%	100%	100%	90%	75%	75%	75%	80%	100%	100%	100%	80%	60%	40%
Experiential Retail	Customer	1%	5%	10%	20%	40%	65%	90%	100%	100%	100%	95%	85%	70%	55%	40%	25%	15%	5%	0%
	Employees	10%	15%	40%	75%	85%	95%	100%	100%	100%	100%	100%	95%	95%	95%	90%	75%	40%	15%	0%
Apartments	Studio/1BR	100%	90%	85%	80%	75%	70%	65%	70%	70%	70%	75%	85%	90%	97%	98%	99%	100%	100%	100%
	Multi-BR	100%	90%	85%	80%	75%	70%	65%	70%	70%	70%	75%	85%	90%	97%	98%	99%	100%	100%	100%
	Reserved	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
	Guest	0%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	40%	60%	100%	100%	100%	100%	80%	50%
General Office	Visitor	0%	0%	5%	25%	75%	100%	75%	50%	25%	10%	5%	0%	0%	0%	0%	0%	0%	0%	0%
	Employee	0%	5%	25%	75%	100%	100%	85%	70%	55%	40%	25%	10%	5%	0%	0%	0%	0%	0%	0%
Surf Park	Visitor	0%	0%	25%	50%	75%	90%	100%	100%	100%	90%	75%	60%	50%	40%	30%	10%	0%	0%	0%
	Employee	15%	30%	60%	75%	90%	100%	100%	100%	100%	100%	90%	80%	70%	60%	50%	40%	30%	15%	5%
Performing Arts Venue	Visitor	0%	0%	0%	0%	0%	0%	0%	0%	0%	5%	10%	50%	70%	90%	100%	100%	100%	80%	50%
	Employee	0%	0%	5%	5%	5%	5%	5%	5%	10%	20%	40%	60%	80%	100%	100%	100%	100%	90%	80%



PARKING DEMAND PROJECTIONS

The model developed by DESMAN projects parking demand for a typically busy weekday and weekend day between the hours of 6:00 AM and 12:00 AM for each month of the year, as well as the last two weeks of December (shown as "Holidays" in the model). Hourly parking demand projections are presented according to land use and user. DESMAN's model has the capacity to isolate parking demand projections for the busiest hour of each weekday and weekend day as well.

The following sections illustrate projected gross demand (before application of presence factors) and peak hour demand (factoring in presence) for the proposed program as DESMAN understands it.

GROSS DEMAND

The development program generates gross demand for up to 2,811 spaces on a weekday and 2,775 spaces on a weekend as shown in *Table 6*.

Table 6: Projected Gross Demand

					WEEKDAY	S	WE	EKDAY EVE	NINGS	١	WEEKEND D	AYS	WE	EKEND EVE	NINGS
Land Use	User Group	Land U	se Data	Proje	ct Ratio	Vehicles	Proje	ct Ratio	Vehicles	Proje	ct Ratio	Vehicles	Proje	ct Ratio	Vehicles
Standard Retail	Customer	84,550	sf GLA	2.07	/ksf GLA	175	2.07	/ksf GLA	175	2.28	/ksf GLA	193	2.28	/ksf GLA	193
	Employee			0.57	/ksf GLA	48	0.57	/ksf GLA	48	0.66	/ksf GLA	55	0.66	/ksf GLA	55
Specialty Grocery	Customer	35,000	sf GLA	2.23	/ksf GLA	78	2.23	/ksf GLA	78	2.36	/ksf GLA	82	2.36	/ksf GLA	82
	Employee			0.49	/ksf GLA	17	0.49	/ksf GLA	17	0.41	/ksf GLA	14	0.41	/ksf GLA	14
Fine/Casual Dining	Customer	35,300	sf GLA	5.70	/ksf GLA	201	6.27	/ksf GLA	221	11.73	/ksf GLA	414	12.09	/ksf GLA	427
	Employee			1.80	/ksf GLA	64	1.80	/ksf GLA	64	3.03	/ksf GLA	107	3.03	/ksf GLA	107
Fast Casual Dining	Customer	4,300	sf GLA	7.13	/ksf GFA	31	8.55	/ksf GFA	37	12.11	/ksf GFA	52	12.92	/ksf GFA	56
	Employee			1.97	/ksf GFA	8	1.97	/ksf GFA	8	2.78	/ksf GFA	12	2.78	/ksf GFA	12
Café/Take Out	Customer	4,300	sf GLA	3.76	/ksf GLA	16	4.56	/ksf GLA	20	8.36	/ksf GLA	36	9.12	/ksf GLA	39
	Employee			2.05	/ksf GLA	9	2.05	/ksf GLA	9	2.33	/ksf GLA	10	2.33	/ksf GLA	10
Museum/Interactive	Customer	35,000	sf GLA	2.21	/ksf GFA	77	2.21	/ksf GFA	77	1.91	/ksf GFA	67	1.91	/ksf GFA	67
	Employee			0.53	/ksf GFA	19	0.53	/ksf GFA	19	0.46	/ksf GFA	16	0.46	/ksf GFA	16
High End Cinema	Customer	800	seats	0.14	/seat	108	0.14	/seat	108	0.19	/seat	148	0.19	/seat	148
	Employee			0.01	/seat	7	0.01	/seat	7	0.01	/seat	7	0.01	/seat	7
Lifestyle/Entertainment	Customer	10,800	sf GLA	4.70	/ksf GLA	51	4.70	/ksf GLA	51	3.92	/ksf GLA	42	3.92	/ksf GLA	42
	Employee			0.33	/ksf GLA	4	0.33	/ksf GLA	4	0.20	/ksf GLA	2	0.20	/ksf GLA	2
Experiential Retail	Customer	15,000	sf GLA	2.28	/ksf GLA	34	2.28	/ksf GLA	34	2.57	/ksf GLA	38	2.57	/ksf GLA	38
	Employees			0.66	/ksf GLA	10	0.66	/ksf GLA	10	0.74	/ksf GLA	11	0.74	/ksf GLA	11
Apartments	Studio/1BR	294	units	0.12	/unit	34	0.12	/unit	34	0.12	/unit	34	0.12	/unit	34
	Multi-BR	132	units	1.02	/unit	134	1.02	/unit	134	1.02	/unit	134	1.02	/unit	134
	Reserved	426	units	1.00	/unit	426	1.00	/unit	426	1.00	/unit	426	1.00	/unit	426
	Guest	426	units	0.05	/unit	20	0.05	/unit	20	0.05	/unit	20	0.05	/unit	20
General Office	Visitor	152,850	sf GFA	0.29	/ksf GFA	44	0.29	/ksf GFA	44	0.03	/ksf GFA	4	0.03	/ksf GFA	4
	Employee			2.87	/ksf GFA	438	2.87	/ksf GFA	438	0.29	/ksf GFA	44	0.29	/ksf GFA	44
Surf Park	Visitor	236,000	sf GFA	0.54	/ksf GFA	129	0.41	/ksf GFA	97	0.44	/ksf GFA	104	0.44	/ksf GFA	104
	Employee			0.04	/ksf GFA	10	0.04	/ksf GFA	10	0.06	/ksf GFA	14	0.06	/ksf GFA	14
Performing Arts Venue	Visitor	3,500	sf GFA	0.14	/seat	499	0.14	/seat	499	0.16	/seat	549	0.16	/seat	549
	Employee			0.03	/seat	120	0.03	/seat	120	0.03	/seat	120	0.03	/seat	120
Subtotal Customers						1,463			1,461			1,749			1,769
Subtotal Employees						754			754			412			412
Subtotal Residents (Unres	erved)					168			168			168			168
Subtotal Reserved						426			426			426			426
TOTAL						2,811			2,809			2,755			2,775

PEAK HOUR DEMAND

The preceding projections of gross demand assume that the Performing Arts Venue (PAV) will be hosting an event which will fill all 3,500 planned seats. The proposed PAV is expected to exert significant demand during a performance, but the frequency of these performances and attendance at each performance is expected to vary throughout the year. Under a worst-case scenario, the venue could account for as many as 619 parking spaces during a sold-out performance on a weekday and 669 spaces on a weekend, as shown in Table 6, above. However, not every performance is anticipated to be sold out and the timing



and frequency of performance, as well as the attendance associated with each one, has not be determined to date.

For the purposes of this analysis, DESMAN evaluated demand under two separate conditions: a day when no event was occurring at the Performing Arts Center (e.g. non-event) and a day when an event filling all 3,500 seats was occurring (e.g. event).

NON-EVENT DAY DEMAND

Adjusting for presence, the projected peak hour demand for the project on a non-event day is for 1,795 spaces during the peak weekday and 1,607 spaces on weekends, as shown in *Table 7*, next page.

Peak hour for a non-event weekday is projected to occur at 2:00 PM in December. Gross weekday demand, exclusive of the PAV, is projected to be for 2,192 parking spaces. Application of presence factors reduces this gross demand for weekdays by 18% (from 2,192 to 1,795, a difference of 397 spaces).

Peak hour for a non-event weekend day is projected to occur at 7:00 PM in December. Gross weekend demand, exclusive of the PAV, is projected to be for 2,106 parking spaces. Application of presence factors reduces this gross demand for weekend by 24% (from 2,106 to 1,607, a difference of 499 spaces).

EVENT DAY DEMAND

Adjusting for presence, the projected peak hour demand for the project on the day of a sold-out event is for 1,945 spaces during the peak weekday and 2,232 spaces on weekends, as shown in *Table 8*, following page.

Peak hour for an event weekday is projected to occur at 7:00 PM in July. Gross weekday demand, with the sold-out event, is projected to be for 2,809 parking spaces. Application of presence factors reduces this gross demand for weekdays by 31% (from 2,809 to 1,945, a difference of 864 spaces).

Peak hour for an event weekend day is projected to occur at 8:00 PM in July. Gross weekend demand, with the sold-out event, is projected to be for 2,775 parking spaces. Application of presence factors reduces this gross demand for weekend by 20% (from 2,775 to 2,232, a difference of 543 spaces).



Table 7: Peak Hour Non-Event Day Demand Projections

								WEEKDAYS						
		January	February	March	April	May	June	July	August	September	October	November	December	Holidays
Land Use	User Group	2:00 PM	2:00 PM	2:00 PM	2:00 PM									
Standard Retail	Customer	93	95	106	105	110	112	107	115	106	110	120	175	140
	Employee	38	38	38	38	38	38	38	38	38	38	43	48	43
Specialty Grocery	Customer	47	44	47	47	49	47	44	42	44	42	44	47	49
	Employee	16	16	16	16	16	15	15	15	15	15	16	16	16
Fine/Casual Dining	Customer	115	114	125	122	128	125	129	131	120	123	119	129	114
	Employee	51	50	55	54	56	55	57	58	53	54	52	57	50
Fast Casual Dining	Customer	13	13	15	14	15	15	15	16	14	15	14	15	14
	Employee	7	7	8	7	8	8	8	8	7	8	7	8	7
Café/Take Out	Customer	13	13	14	14	14	14	14	14	14	14	13	14	13
	Employee	8	8	8	8	8	8	9	9	8	8	8	8	8
Museum/Interactive	Customer	62	62	67	61	65	67	69	71	64	62	57	60	64
	Employee	17	17	18	16	17	18	18	19	17	17	15	16	17
High End Cinema	Customer	16	12	12	11	16	24	33	24	9	9	15	14	59
	Employee	2	2	2	2	2	3	3	3	2	2	2	2	4
Lifestyle/Entertainment	Customer	38	36	34	33	29	29	29	27	31	33	34	36	36
	Employee	4	4	3	3	3	3	3	3	3	3	3	4	4
Experiential Retail	Customer	19	19	22	21	23	23	22	23	22	22	24	34	27
	Employees	8	8	8	8	8	8	8	8	8	8	9	10	9
Apartments	Studio/1BR	24	24	24	24	24	23	21	20	23	24	23	21	20
	Multi-BR	94	94	94	94	94	89	84	80	89	94	89	84	80
	Reserved	426	426	426	426	426	426	426	426	426	426	426	426	426
	Guest	4	4	4	4	4	4	4	3	4	4	4	4	3
General Office	Visitor	44	44	42	44	44	42	40	37	42	44	44	44	35
	Employee	438	438	416	438	438	416	394	372	416	438	438	438	350
Surf Park	Visitor	65	77	90	103	116	129	129	129	116	103	90	77	65
Danfa (A-t-)/	Employee	7	8	8	9	10	10	10	10	9	9	8	8	7
Performing Arts Venue	Visitor	0	0	0	0	0	0	0	0	0	0	0	0	0
	Employee	0	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal Customers		529	533	578	579	613	631	635	632	586	581	578	649	619
Subtotal Employees		596	596	580	599	604	582	563	543	576	600	601	615	515
Subtotal Residents (Unreserved) Subtotal Reserved		118 426	118 426	118 426	118 426	118 426	112 426	105 426	100 426	112 426	118 426	112 426	105 426	100 426
TOTAL		1,669	1,673	1,702	1,722	1,761	1,751		1,701	1,700	426 1,725		1,795	1,660
IUIAL		1,669	1,6/3	1,702	1,/22	1,/61	1,751	1,729	1,/01	1,700	1,/25	1,717	1,/95	1,660
Planned Supply		1,935	1,935	1,935	1,935	1,935	1,935	1,935	1,935	1,935	1,935	1.935	1,935	1,935
Surplus/(Deficit)	-	266	262	233	213	174	184	206	234	235	210	218	140	275

								WEEKENDS						
		January	February	March	April	May	June	July	August	September	October	November	December	Holiday
Land Use	User Group	7:00 PM	7:00 PM	7:00 PM	7:00 PM	7:00 PM	7:00 PM	7:00 PM	7:00 PM	7:00 PM	7:00 PM	7:00 PM	7:00 PM	7:00 PN
Standard Retail	Customer	81	83	93	91	96	98	93	100	92	96	104	145	108
	Employee	35	35	35	35	35	35	35	35	35	35	40	44	42
Specialty Grocery	Customer	34	32	34	34	36	34	32	31	32	31	32	34	48
	Employee	9	9	9	9	9	9	8	8	9	9	9	9	11
Fine/Casual Dining	Customer	357	353	389	377	398	389	402	406	373	381	369	402	334
	Employee	94	93	103	100	105	103	106	107	98	101	97	106	93
Fast Casual Dining	Customer	34	34	37	36	38	38	39	39	36	38	36	38	35
	Employee	10	10	11	11	11	11	11	11	11	11	10	11	10
Café/Take Out	Customer	27	27	31	29	30	30	31	31	30	31	29	30	31
	Employee	8	8	9	8	9	9	9	9	9	9	8	9	8
Museum/Interactive	Customer	2	2	2	2	2	2	2	2	2	2	2	2	10
	Employee	1	1	2	1	1	2	2	2	1	1	1	1	3
High End Cinema	Customer	84	70	79	69	84	97	109	89	60	73	92	79	104
	Employee	6	6	6	6	6	7	7	6	6	6	6	6	7
Lifestyle/Entertainment	Customer	38	36	34	32	28	28	28	26	30	32	34	36	30
	Employee	2	2	2	2	2	2	2	2	2	2	2	2	2
Experiential Retail	Customer	12	12	13	13	14	14	13	14	13	14	15	21	21
	Employees	8	8	8	8	8	8	8	8	8	8	9	10	9
Apartments	Studio/1BR	33	33	33	33	33	31	30	28	31	33	31	30	26
	Multi-BR	130	130	130	130	130	123	117	110	123	130	123	117	103
	Reserved	426	426	426	426	426	426	426	426	426	426	426	426	426
	Guest	20	20	20	20	20	19	18	17	19	20	19	18	10
General Office	Visitor	0	0	0	0	0	0	0	0	0	0	0	0	0
	Employee	0	0	0	0	0	0	0	0	0	0	0	0	2
Surf Park	Visitor	21	25	29	33	37	42	42	42	37	33	29	25	26
	Employee	6	6	7	7	8	8	8	8	8	7	7	6	7
Performing Arts Venue	Visitor	0	0	0	0	0	0	0	0	0	0	0	0	0
	Employee	0	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal Customers		710	694	761	736	783	791	809	797	724	751	761	830	757
Subtotal Employees		179	178	192	187	194	194	196	196	187	189	189	204	194
Subtotal Residents (Unreserved)		163	163	163	163	163	154	147	138	154	163	154	147	129
Subtotal Reserved		426	426	426	426	426	426	426	426	426	426	426	426	426
TOTAL		1,478	1,461	1,542	1,512	1,566	1,565	1,578	1,557	1,491	1,529	1,530	1,607	1,506
Planned Supply		1,935	1,935	1,935	1,935	1,935	1,935	1,935	1,935	1,935	1,935	1,935	1,935	1,935
Surplus/(Deficit)		457	474	393	423	369	370	357	378	444	406	405	328	429

PEAK DAY/HOUR =



Table 8: Peak Hour Event Day Demand Projections

								WEEKDAYS						
		January	February	March	April	May	June	July	August	September	October	November	December	Holidays
Land Use	User Group	7:00 PM	7:00 PM	7:00 PM	7:00 PM	7:00 PM	7:00 PM	7:00 PM	7:00 PM	7:00 PM	7:00 PM	7:00 PM	7:00 PM	7:00 PM
Standard Retail	Customer	93	95	106	105	110	112	107	115	106	110	120	131	77
	Employee	36	36	36	36	36	36	36	36	36	36	41	46	41
Specialty Grocery	Customer	70	66	70	70	73	70	66	62	66	62	66	70	73
	Employee	14	14	14	14	14	14	13	13	14	14	14	14	14
Fine/Casual Dining	Customer	194	192	212	206	217	212	219	221	203	208	201	219	192
	Employee	56	56	61	60	63	61	63	64	59	60	58	63	56
Fast Casual Dining	Customer	25	25	28	28	29	29	29	30	28	28	27	29	27
	Employee	7	7	7	7	7	7	8	8	7	7	7	7	7
Café/Take Out	Customer	14	14	16	15	15	15	16	16	15	16	15	16	15
	Employee	7	7	8	8	8	8	8	8	8	8	8	8	8
Museum/Interactive	Customer	19	19	21	19	21	21	22	22	20	19	18	19	20
	Employee	3	3	4	3	3	4	4	4	3	3	3	3	3
High End Cinema	Customer	23	18	17	16	23	35	48	35	13	13	22	20	86
	Employee	4	4	4	4	4	5	5	5	4	4	4	4	7
Lifestyle/Entertainment	Customer	46	44	41	39	34	34	34	32	37	39	41	44	44
	Employee	4	4	4	3	3	3	3	3	4	4	4	4	4
Experiential Retail	Customer	11	11	12	12	12	13	12	13	12	12	13	19	15
	Employees	8	8	8	8	8	8	8	8	8	8	9	10	9
Apartments	Studio/1BR	33	33	33	33	33	31	30	28	31	33	31	30	28
	Multi-BR	130	130	130	130	130	123	117	110	123	130	123	117	110
	Reserved	426	426	426	426	426	426	426	426	426	426	426	426	426
	Guest	20	20	20	20	20	19	18	17	19	20	19	18	17
General Office	Visitor	0	0	0	0	0	0	0	0	0	0	0	0	0
	Employee	44	44	42	44	44	42	39	37	42	44	44	44	35
Surf Park	Visitor	19	23	27	31	35	39	39	39	35	31	27	23	19
	Employee	4	5	5	5	6	6	6	6	5	5	5	5	4
Performing Arts Venue	Visitor	337	359	382	404	427	449	449	449	427	404	382	359	337
	Employee	120	120	120	120	120	120	120	120	120	120	120	120	120
Subtotal Customers		871	886	952	965	1,016	1,048	1,059	1,051	981	962	951	967	922
Subtotal Employees		307	308	313	312	316	314	313	312	310	313	317	328	308
Subtotal Residents (Unreserved)		163	163	163	163	163	154	147	138	154	163	154	147	138
Subtotal Reserved		426	426	426	426	426	426	426	426	426	426	426	426	426
TOTAL		1,767	1,783	1,854	1,866	1,921	1,942	1,945	1,927	1,871	1,864	1,848	1,868	1,794
Bl 16 1		4 005		4.005	4.005	4 005		4.005	4.005	4 005	4 005		4.00=	4 005
Planned Supply		1,935	1,935	1,935	1,935	1,935	1,935	1,935	1,935	1,935	1,935	1,935	1,935	1,935
Surplus/(Deficit)		168	152	81	69	14	(7)	(10)	8	64	71	87	67	141

PEAK DAY/HOUR =								WEEKENDS						
		January	February	March	April	May	June	July	August	September	October	November	December	Holidays
Land Use	User Group	8:00 PM	8:00 PM	8:00 PM	8:00 PM	8:00 PM	8:00 PM	8:00 PM	8:00 PM	8:00 PM	8:00 PM	8:00 PM	8:00 PM	8:00 PM
Standard Retail	Customer	70	72	80	79	83	85	81	87	80	83	90	125	77
otaniaara netan	Employee	33	33	33	33	33	33	33	33	33	33	37	41	37
Specialty Grocery	Customer	16	15	16	16	17	16	15	15	15	15	15	16	17
specially diocely	Employee	7	7	7	7	7	7	6	6	7	7	7	7	7
Fine/Casual Dining	Customer	376	371	410	397	418	410	423	427	393	401	389	423	371
i inc, casaar si inig	Employee	94	93	103	100	105	103	106	107	98	101	97	106	93
Fast Casual Dining	Customer	31	31	35	34	36	35	36	36	34	35	33	36	33
rust cusuur siiniig	Employee	10	10	11	11	11	11	11	11	11	11	10	11	10
Café/Take Out	Customer	17	17	19	18	19	19	20	20	19	19	18	19	18
cure, rake out	Employee	5	5	6	6	6	6	6	6	6	6	6	6	6
Museum/Interactive	Customer	0	0	0	0	0	0	0	0	0	0	0	0	0
museum, merueure	Employee	1	1	1	1	1	1	1	1	1	1	1	1	1
High End Cinema	Customer	105	87	99	86	105	121	136	111	75	92	115	99	148
riigii Eila cilicilia	Employee	6	6	6	6	6	7	7	6	6	6	6	6	7
Lifestyle/Entertainment	Customer	42	40	38	36	32	32	32	29	34	36	38	40	40
Emestyle, Emeritaminent	Employee	2	2	2	2	2	2	2	2	2	2	2	2	2
Experiential Retail	Customer	9	9	10	10	10	10	10	10	10	10	11	15	12
experiential netail	Employees	8	8	8	8	8	8	8	8	8	8	9	10	9
Apartments	Studio/1BR	33	33	33	33	33	32	30	28	32	33	32	30	28
	Multi-BR	131	131	131	131	131	125	118	112	125	131	125	118	112
	Reserved	426	426	426	426	426	426	426	426	426	426	426	426	426
	Guest	20	20	20	20	20	19	18	17	19	20	19	18	17
General Office	Visitor	0	0	0	0	0	0	0	0	0	0	0	0	0
	Employee	0	0	0	0	0	0	0	0	0	0	0	0	0
Surf Park	Visitor	16	19	22	25	28	31	31	31	28	25	22	19	16
	Employee	5	5	6	6	7	7	7	7	6	6	6	5	5
Performing Arts Venue	Visitor	412	439	467	494	522	549	549	549	522	494	467	439	412
	Employee	120	120	120	120	120	120	120	120	120	120	120	120	120
Subtotal Customers	, ,,,,	1,114	1,120	1,216	1,215	1,290	1,327	1,351	1,332	1,229	1,230	1,217	1,249	1,161
Subtotal Employees		291	290	303	300	306	305	307	307	298	301	301	315	297
Subtotal Residents (Unreserved)		164	164	164	164	164	157	148	140	157	164	157	148	140
Subtotal Reserved		426	426	426	426	426	426	426	426	426	426	426	426	426
TOTAL		1,995	2,000	2,109	2,105	2,186	2,215	2,232	2,205	2,110	2,121	2,101	2,138	2,024
		2,000	-,000	-,	-,-00	_,	-,	_,	_,_03	-,	-,	-,	=,200	_,
Planned Supply		1,935	1,935	1,935	1,935	1,935	1,935	1,935	1,935	1,935	1,935	1,935	1,935	1,935
Surplus/(Deficit)	•	(60)	(65)	(174)	(170)	(251)	(280)	(297)	(270)	(175)	(186)	(166)	(203)	(89)

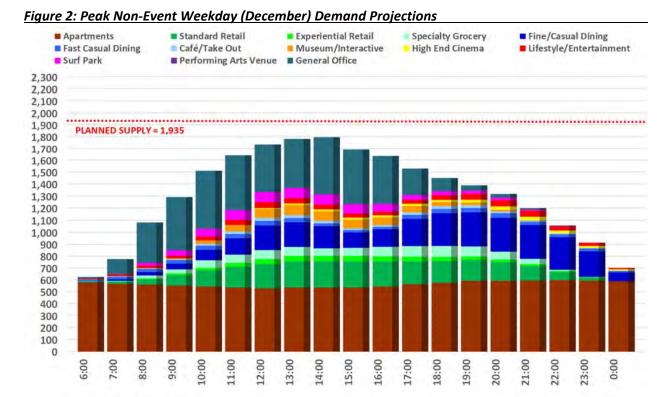
PEAK DAY/HOUR =



PARKING SUPPLY ADEQUACY

Under non-event day conditions, the planned on-site parking supply of 1,935 spaces is more than adequate to meet peak hour conditions on weekdays and weekends.

On weekdays, with a peak hour projected demand for 1,795 spaces at 2:00 PM in December, there are still 140 spaces available in the planned supply. This is shown in Table 7 on the preceding pages and illustrated in *Figure 2*, below.



On weekends, with a peak hour projected demand for 1,607 spaces at 7:00 PM in December, there are still 328 spaces available in the planned supply. This is shown in Table 7 on the preceding pages and illustrated in *Figure 3*, next page.



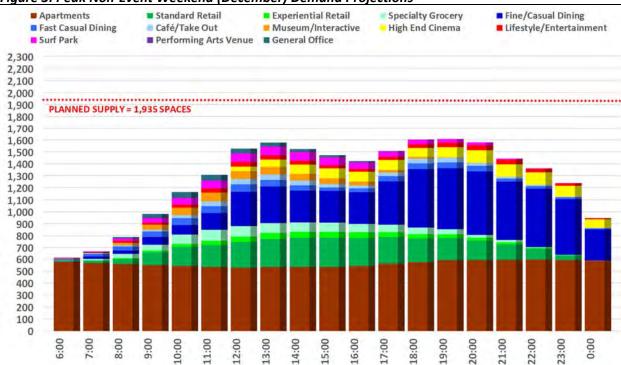


Figure 3: Peak Non-Event Weekend (December) Demand Projections

On event days, the on-site parking supply will need to be supplemented to meet peak hour demands. This is not an unusual condition for a mixed-use project including a Performing Arts Venue in an urban setting. With the exception of major sporting venues, it is unusual to find a municipality or developer who plans their parking supply to completely encompass all the needs of the project, inclusive of parking demand driven by performances, as it is extremely expensive to provide infrastructure which will not be fully utilized on a consistent basis. Rather, the on-site supply is typically designed to accommodate non-event peak hour conditions and some portion of event-driven need, which is what has occurred in this instance.

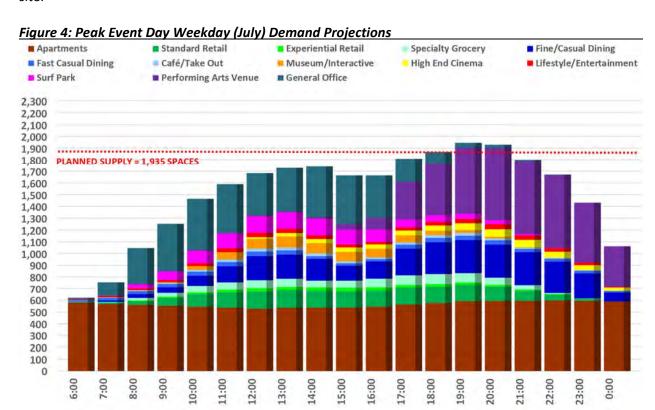
On weekdays when a sold-out event occurs, the peak hour demand will exceed the on-site planned supply (1,935 spaces) by a small amount. Projections of peak hour (7:00 PM) parking demand on the busiest weekday of the year (in July) are for 1,945 spaces, creating a 10-vehicle overflow on the night of a sold-out event, as illustrated in *Figure 4* on the following page. As Table 8, on the previous page shows, these conditions are project to only occur in June and July; at the peak weekday hour during other months of the year there are between 8 and 168 spaces available at the busiest hour.

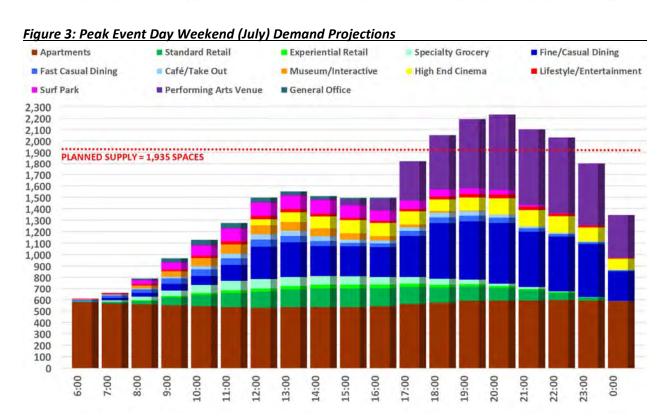
This projected shortfall is contingent upon an event occupying 3,500 seats or more in the Performing Arts Venue on a weekday evening in the summer. If the event fills just 3,000 seats, parking surpluses are projected for the peak hour.

On weekends, when there is a sold-out event, the overflow is anticipated to be more pronounced. Under these conditions, DESMAN projects that the development could require as many as 297 spaces above and beyond the on-site planned supply (1,935 spaces) at the peak hour, as shown in Table 8 on the preceding pages and illustrated in *Figure 5* on the following page.



This projected shortfall is contingent upon an event occupying the full capacity (3,500 seats) of the PAV; an event filling more than 1,925 seats or less can be accommodated within the planned parking supply on site.







CONCLUSIONS

The project possesses an adequate on-site parking supply to accommodate all uses at the peak hour under non-event conditions, as well as weekday events with attendance to fill 3,000 seats or less and weekend events with attendance to fill 1,925 seats or less. On those occasions where attendance exceeds these thresholds, there may be spillover from the project into adjacent areas.

As noted in prior sections, some spillover during sold-out events is not a unique condition to urban mixeduse projects which include a Performing Arts Venue. Spillover caused by high attendance events is typically addressed through a parking management plan, rather than building an oversized parking supply which will add considerable cost to the project for little added benefit outside those limited dates when these events occur.

Commonly, event-driven parking demand is accommodated through a combination of on-site supply and an aggressive parking management program which may:

- Relocate some captive, regular users (such as employees or residents) to other parking facilities in the vicinity either through direct assignment or price incentives;
- Direct event attendees to other parking facilities in the vicinity either through direct assignment or price incentives;
- Direct either regular users or event attendees to off-site parking facilities through direct assignment and provide shuttle services to move these users between satellite parking facilities and the venue;
- Temporarily increase on-site parking capacity through valet- or assisted-parking initiatives;
- Augment the event parking supply though the execution of shared use agreements with adjacent property owners holding parking facilities with available capacity.;
- Reduce parking demand by sponsoring programs which promote use of alternative modes of transportation. This can include the provision of free or subsidized passes to ride local transit, take a taxi and/or shuttle, and/or use a ride-sharing service like Uber or Lyft.

A program documenting which of these incentives, or others, will be employed; how they will be conveyed to the target audience; and the anticipated impact/benefit of each action is commonly required by the agency tasked with reviewing and approving the project. The management plan, which includes details of about how, when and under what conditions each initiative will be executed and how they will be communicated to their intended audience (i.e. website, email, direct mail, radio, social media, etc.), is commonly filed as part of the General Conditions of Approval in many instances.

DESMAN believes that this project is completely feasible as planned, if such a plan is included in the final design. There are multiple resources in the area that could be employed to address occasional event-driven spillover from the project. For example, in addition to the on-site supply planned for the project, there are roughly 70 curbside parking spaces on the block faces making up the outer perimeter of the project which may be available to accommodate event-driven overflow. The "Preliminary Traffic Impact Study and Parking Assessment" completed by Kimley Horn for the proposed Virginia Beach Arena in January 2015 indicates there will be roughly 600 parking spaces in commercial parking lots located on the blocks adjacent to the development when construction is complete that will also be available to capture



spillover from major events and roughly 900 additional spaces within a 3-block walking distance of the project site.

Finally, the City is moving forward with an automated vehicle shuttle pilot program with goal of providing east-west transit service between the Convention Center and Sports Center in the 19th Street Corridor to/from The Wave mixed-use development. The shuttle would provide connectivity to the satellite parking supply surrounding the Convention and Sports Center as well as the Oceanfront Transportation Center, currently on Arctic Avenue between 19th/20th Streets. This new program will be proposed in fiscal year 2019-2020 to implement the automated vehicle shuttle including program components; vehicle procurement; regulatory approvals; infrastructure support; and on-going management and maintenance.

OTHER COMMON CONDITIONS OF APPROVAL

Shared Parking studies, like the preceding, are commonly used as part of the application process for waivers against location zoning requirements. The underlying assumption behind accepting a shared parking study to justify a waiver is that the results of the study are a reasonable reflection of actual future use and therefore the proposed parking supply will be appropriate to support the project, even if it is smaller than what local zoning might require.

This assumption is supported in part by the core Shared Parking methodology, which employs base parking demand ratios, developed through empirical observation of existing land uses, that reflect the 85th percentile of conditions (e.g. case studies) used to develop those ratios. As with traffic engineering, the 85th percentile is adopted as a reasonably conservative design standard that will result in a parking system adequately sized to support the development's needs under all but the most extraordinary conditions, which may never occur or only occur very intermittently. This same methodology also uses a mix of field observations and actual operating records for various land uses to project variations in demand according to time of day or time of year; again founding the projections in real-world conditions.

It is not unusual for a community to accept the results of a shared parking study as justification for a waiver, but structure the waiver or special permit to require additional conditions of the developer should the analysis understate the true parking need for the project. Common conditions imposed on similar projects permitted in other communities include:

- A requirement for the developer to execute periodic 'after studies' which capture actual parking
 conditions on the project site at various benchmarks and compare observed actual occupancy at
 various phases of development to projected demand per the shared parking model prepared for
 the project.
- A requirement that the developer create and be prepared to execute a shuttle program for conveying employees and visitors between the project site and nearby transit hubs and/or offsite parking facilities, should the project's observed parking occupancy exceed a prescribed threshold.
- A requirement that the developer create and be prepared to execute a satellite parking program
 for employees during periods of peak demand, such as the Christmas holidays. This measure shifts
 parking demand off the project site and to an available facility some distance from the project,
 creating additional capacity in the planned parking system when needed.



- A requirement that the developer prepare and execute shared parking agreements with abutting
 properties to enhance the on-site parking supply when needed. This measure shifts parking
 demand off the project site and to an adjacent facility, creating additional capacity in the planned
 parking system when needed.
- A requirement that the developer fund and/or administer a Transportation Demand Management (TDM) program for project tenants and their guests focused on promoting alternate modes of transportation to mitigate parking demand on the site. TDM initiatives might include subsidized transit passes; rideshare or ride matching programs; carsharing services; bicycle improvements such as racks, showers and lockers on-site; and other actions or features intended to promote less travel to the site in a single-occupant personal vehicle.
- A requirement that the developer be prepared to execute an on-site valet parking program during
 periods of peak demand, such as the Christmas holidays. This measure allows more vehicles to be
 parked on-site than there is striped capacity.



Appendix A: Assumed Development Program

		Standard	Specialty	Fine /Casual	Fast/Casual	Café/	Museum/	High End	Lifestyle/	Experiential	Reside		General	Surf	Performing	Parking
Sgmt	Tenant	Retail	Grocery	Dining	Dining	Take-Out	Interactive	Cinema	Entertainment	Retail	Studio/Single	Mutli-BDR	Office	Park	Arts Venue	(spaces)
	Grocery Store		35,000													
	Tanzy			9,300												
	Retail 1	7,300		.,												
*	Retail 2	7,300														
North West Block	Retail 3			8,000												
st l	Retail 4	3,600														
×	Retail 5	4,600														
£	Retail 6					4,300										
Š	iPIC							800								
	National Geographic						35,000									
	Apartments										120	54				
	Parking															666
	Retail 1				4,300											
	Retail 2	7,300														
	Retail 3	4,800														
	Retail 4	4,800														
Š	Retail 5	5,100														
North Block	Retail 6	5,600														
£	Retail 7	8,000		8,000												
8	Bridge (Experiential Retail)									15,000						
	Brooklyn Boulders								10,800							
	Retail 8	16,500														
	Apartments										174	78				
	Parking															554
는 x	Retail 1	6,800														
Chruch Block	Office												150,000			
5 =	Parking															715
	Surf Lagoon/Lounge Area													200,000		
Block	Surf Shop/Operations	2,850											2,850			
ĕ	2nd Floor Surf Deck/Venue													16,000		
Surf	Vibe Park													20,000		
	Parking															0
×	Entertainment Venue						-								3,500	
South Block	Roof Bar			10,000												
- л <u>п</u>	Parking															0
	SubTotal	84,550	35,000	35,300	4,300	4,300	35,000	800	10,800	15,000	294	132	152,850	236,000	3,500	1,935