A G E N D A
JAMES CITY COUNTY ECONOMIC DEVELOPMENT AUTHORITY
RETREAT
Freedom Park Community Building, 5537 Centerville Road, Williamsburg VA 23188
December 13, 2018
3:30 PM

A. CALL TO ORDER

B. ROLL CALL

C. ROUTINE BUSINESS

D. PRESENTATIONS/DISCUSSIONS

1. EDA Retreat Materials

E. ADJOURNMENT

AGENDA ITEM NO. D.1.

ITEM SUMMARY

DATE: 12/13/2018

TO: The Economic Development Authority

FROM: Amy Jordan, EDA Secretary

SUBJECT: Retreat Materials

ATTACHMENTS:

	Description	Type
	ESRI	Cover Memo
	Target Market Study	Cover Memo
	JCC Strategic Plan ED	Cover Memo
	JCC Comp Plan ED	Cover Memo
	Mission	Cover Memo
	Incentive Guide	Cover Memo
	Opportunity Zone	Cover Memo
	Technology Zone	Cover Memo
	Strategic Investment Areas	Cover Memo
	EDA Goals 2017	Cover Memo
	Map	Cover Memo
	JRCC Parcels	Cover Memo
	JRCC Map	Cover Memo

Community Profile

James City County, VA
James City County, VA (51095)
Geography: County

ESRI BAO Market and Demographic 2018,

	James City Co...
Population Summary	
2000 Total Population	48,102
2010 Total Population	67,009
2018 Total Population	77,427
2018 Group Quarters	1,078
2023 Total Population	84,624
2018-2023 Annual Rate	1.79%
2018 Total Daytime Population	70,987
Workers	28,123
Residents	42,864
Household Summary	
2000 Households	19,003
2000 Average Household Size	2.47
2010 Households	26,860
2010 Average Household Size	2.45
2018 Households	30,901
2018 Average Household Size	2.47
2023 Households	33,723
2023 Average Household Size	2.48
2018-2023 Annual Rate	1.76%
2010 Families	19,557
2010 Average Family Size	2.85
2018 Families	22,269
2018 Average Family Size	2.90
2023 Families	24,194
2023 Average Family Size	2.92
2018-2023 Annual Rate	1.67%
Housing Unit Summary	
2000 Housing Units	20,772
Owner Occupied Housing Units	70.5%
Renter Occupied Housing Units	21.0%
Vacant Housing Units	8.5%
2010 Housing Units	29,797
Owner Occupied Housing Units	68.6%
Renter Occupied Housing Units	21.6%
Vacant Housing Units	9.9%
2018 Housing Units	34,319
Owner Occupied Housing Units	72.4%
Renter Occupied Housing Units	17.6%
Vacant Housing Units	10.0%
2023 Housing Units	37,533
Owner Occupied Housing Units	73.2%
Renter Occupied Housing Units	16.7%
Vacant Housing Units	10.2%
Median Household Income	
2018	$83,244
2023	$96,788
Median Home Value	
2018	$365,767
2023	$403,028
Per Capita Income	
2018	$44,149
2023	$51,873
Median Age	
2010	44.9
2018	47.3
2023	48.3

Data Note: Household population includes persons not residing in group quarters. Average Household Size is the household population divided by total households. Persons in families include the householder and persons related to the householder by birth, marriage, or adoption. Per Capita Income represents the income received by all persons aged 15 years and over divided by the total population.
Source: U.S. Census Bureau, Census 2010 Summary File 1. Esri forecasts for 2018 and 2023 Esri converted Census 2000 data into 2010 geography.

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	James City Co...
2018 Households by Income	
Household Income Base	30,901
<$15,000	5.8%
$15,000 - $24,999	6.2%
$25,000 - $34,999	6.2%
$35,000 - $49,999	9.9%
$50,000 - $74,999	16.5%
$75,000 - $99,999	13.8%
$100,000 - $149,999	20.6%
$150,000 - $199,999	9.7%
$200,000+	11.3%
Average Household Income	$109,518
2023 Households by Income	
Household Income Base	33,723
<$15,000	4.7%
$15,000 - $24,999	5.0%
$25,000 - $34,999	5.0%
$35,000 - $49,999	8.4%
$50,000 - $74,999	14.8%
$75,000 - $99,999	13.6%
$100,000 - $149,999	23.2%
$150,000 - $199,999	10.9%
$200,000+	14.5%
Average Household Income	$129,157
2018 Owner Occupied Housing Units by Value	
Total	24,857
<$50,000	2.4%
$50,000 - $99,999	1.1%
$100,000 - $149,999	3.3%
$150,000 - $199,999	7.9%
$200,000 - $249,999	10.7%
$250,000 - $299,999	10.6%
$300,000 - $399,999	21.4%
$400,000 - $499,999	14.4%
$500,000 - $749,999	18.5%
$750,000 - $999,999	6.4%
$1,000,000 - $1,499,999	2.6%
$1,500,000 - $1,999,999	0.5%
$2,000,000 +	0.4%
Average Home Value	$432,803
2023 Owner Occupied Housing Units by Value	
Total	27,468
<$50,000	1.8%
$50,000 - $99,999	0.8%
$100,000 - $149,999	2.5%
$150,000 - $199,999	6.2%
$200,000 - $249,999	9.1%
$250,000 - $299,999	9.3%
$300,000 - $399,999	19.7%
$400,000 - $499,999	15.1%
$500,000 - $749,999	22.1%
$750,000 - $999,999	8.7%
$1,000,000 - $1,499,999	3.3%
$1,500,000 - $1,999,999	0.6%
$2,000,000 +	0.5%
Average Home Value	$477,042

Data Note: Income represents the preceding year, expressed in current dollars. Household income includes wage and salary earnings, interest dividends, net rents, pensions, SSI and welfare payments, child support, and alimony.
Source: U.S. Census Bureau, Census 2010 Summary File 1. Esri forecasts for 2018 and 2023 Esri converted Census 2000 data into 2010 geography.

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	James City Co...
2010 Population by Age	
Total	67,009
0 - 4	5.2%
5 - 9	5.7%
10 - 14	6.4%
15 - 24	11.1%
25 - 34	9.5%
35 - 44	12.1%
45 - 54	14.9%
55 - 64	14.3%
65 - 74	11.5%
75 - 84	6.6%
85 +	2.6%
18 +	78.5%
2018 Population by Age	
Total	77,427
0 - 4	4.7%
5 - 9	5.2%
10 - 14	5.7%
15 - 24	10.4%
25 - 34	10.4%
35 - 44	10.7%
45 - 54	13.0%
55 - 64	14.9%
65 - 74	13.7%
75 - 84	7.9%
85 +	3.3%
18 +	80.9%
2023 Population by Age	
Total	84,624
0 - 4	4.6%
5 - 9	5.1%
10 - 14	5.5%
15 - 24	9.5%
25 - 34	10.3%
35 - 44	11.5%
45 - 54	11.5%
55 - 64	14.4%
65 - 74	14.6%
75 - 84	9.4%
85 +	3.7%
18 +	81.5%
2010 Population by Sex	
Males	32,346
Females	34,663
2018 Population by Sex	
Males	37,386
Females	40,041
2023 Population by Sex	
Males	40,893
Females	43,731

Source: U.S. Census Bureau, Census 2010 Summary File 1. Esri forecasts for 2018 and 2023 Esri converted Census 2000 data into 2010 geography.

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	James City Co...
2010 Population by Race/Ethnicity	
Total	67,009
White Alone	80.3%
Black Alone	13.1%
American Indian Alone	0.3%
Asian Alone	2.2%
Pacific Islander Alone	0.1%
Some Other Race Alone	1.4%
Two or More Races	2.6%
Hispanic Origin	4.5%
Diversity Index	39.5
2018 Population by Race/Ethnicity	
Total	77,427
White Alone	78.3%
Black Alone	13.4%
American Indian Alone	0.4%
Asian Alone	2.9%
Pacific Islander Alone	0.1%
Some Other Race Alone	1.8%
Two or More Races	3.2%
Hispanic Origin	5.8%
Diversity Index	43.8
2023 Population by Race/Ethnicity	
Total	84,624
White Alone	76.4%
Black Alone	13.6%
American Indian Alone	0.5%
Asian Alone	3.6%
Pacific Islander Alone	0.1%
Some Other Race Alone	2.1%
Two or More Races	3.8%
Hispanic Origin	6.8%
Diversity Index	47.4
2010 Population by Relationship and Household Type	
Total	67,009
In Households	98.4%
In Family Households	84.7%
Householder	29.2%
Spouse	24.2%
Child	27.3%
Other relative	2.6%
Nonrelative	1.4%
In Nonfamily Households	13.7%
In Group Quarters	1.6%
Institutionalized Population	1.4%
Noninstitutionalized Population	0.2%

Data Note: Persons of Hispanic Origin may be of any race. The Diversity Index measures the probability that two people from the same area will be from different race/ethnic groups.
Source: U.S. Census Bureau, Census 2010 Summary File 1. Esri forecasts for 2018 and 2023 Esri converted Census 2000 data into 2010 geography.

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	James City Co...
2018 Population 25+ by Educational Attainment	
Total	57,281
Less than 9th Grade	2.2%
9th - 12th Grade, No Diploma	3.3%
High School Graduate	16.6%
GED/Alternative Credential	1.8%
Some College, No Degree	18.1%
Associate Degree	7.9%
Bachelor's Degree	27.6%
Graduate/Professional Degree	22.5%
2018 Population 15+ by Marital Status	
Total	65,352
Never Married	24.0%
Married	59.7%
Widowed	6.2%
Divorced	10.1%
2018 Civilian Population 16+ in Labor Force	
Civilian Employed	97.1%
Civilian Unemployed (Unemployment Rate)	2.9%
2018 Employed Population 16+ by Industry	
Total	34,289
Agriculture/Mining	0.8%
Construction	6.2%
Manufacturing	5.8%
Wholesale Trade	1.7%
Retail Trade	11.4%
Transportation/Utilities	3.0%
Information	1.5%
Finance/Insurance/Real Estate	4.8%
Services	57.8%
Public Administration	7.0%
2018 Employed Population 16+ by Occupation	
Total	34,289
White Collar	66.2%
Management/Business/Financial	17.0%
Professional	27.3%
Sales	11.0%
Administrative Support	10.9%
Services	20.2%
Blue Collar	13.6%
Farming/Forestry/Fishing	0.5%
Construction/Extraction	4.3%
Installation/Maintenance/Repair	3.0%
Production	2.5%
Transportation/Material Moving	3.4%
2010 Population By Urban/ Rural Status	
Total Population	67,009
Population Inside Urbanized Area	84.1%
Population Inside Urbanized Cluster	0.0%
Rural Population	15.9%

Source: U.S. Census Bureau, Census 2010 Summary File 1. Esri forecasts for 2018 and 2023 Esri converted Census 2000 data into 2010 geography.

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	James City Co...
2010 Households by Type	
Total	26,860
Households with 1 Person	21.9%
Households with 2+ People	78.1%
Family Households	72.8%
Husband-wife Families	60.3%
With Related Children	21.4%
Other Family (No Spouse Present)	12.5%
Other Family with Male Householder	3.0%
With Related Children	1.7%
Other Family with Female Householder	9.5%
With Related Children	6.2%
Nonfamily Households	5.2%
All Households with Children	29.6%
Multigenerational Households	3.0%
Unmarried Partner Households	4.2%
Male-female	3.6%
Same-sex	0.6%
2010 Households by Size	
Total	26,860
1 Person Household	21.9%
2 Person Household	42.3%
3 Person Household	15.5%
4 Person Household	12.9%
5 Person Household	4.9%
6 Person Household	1.6%
7 + Person Household	0.8%
2010 Households by Tenure and Mortgage Status	
Total	26,860
Owner Occupied	76.1%
Owned with a Mortgage/Loan	56.5%
Owned Free and Clear	19.5%
Renter Occupied	23.9%
2010 Housing Units By Urban/ Rural Status	
Total Housing Units	29,797
Housing Units Inside Urbanized Area	85.2%
Housing Units Inside Urbanized Cluster	0.0%
Rural Housing Units	14.8%

Data Note: Households with children include any households with people under age 18, related or not. Multigenerational households are families with 3 or more parent-child relationships. Unmarried partner households are usually classified as nonfamily households unless there is another member of the household related to the householder. Multigenerational and unmarried partner households are reported only to the tract level. Esri estimated block group data, which is used to estimate polygons or non-standard geography.
Source: U.S. Census Bureau, Census 2010 Summary File 1. Esri forecasts for 2018 and 2023 Esri converted Census 2000 data into 2010 geography.

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		James City Co...
Top 3 Tapestry Segments		
	1.	Silver & Gold (9A)
	2.	Exurbanites (1E)
	3.	Comfortable Empty Nesters
2018 Consumer Spending		
Apparel & Services: Total $		$84,973,596
Average Spent		$2,749.87
Spending Potential Index		126
Education: Total $		$57,209,347
Average Spent		$1,851.38
Spending Potential Index		128
Entertainment/Recreation: Total $		$130,196,891
Average Spent		$4,213.36
Spending Potential Index		131
Food at Home: Total $		$195,140,058
Average Spent		$6,315.01
Spending Potential Index		126
Food Away from Home: Total $		$139,009,788
Average Spent		$4,498.55
Spending Potential Index		128
Health Care: Total $		$238,015,736
Average Spent		$7,702.53
Spending Potential Index		135
HH Furnishings & Equipment: Total $		$85,575,453
Average Spent		$2,769.34
Spending Potential Index		133
Personal Care Products & Services: Total $		$33,980,744
Average Spent		$1,099.66
Spending Potential Index		133
Shelter: Total $		$660,949,246
Average Spent		$21,389.25
Spending Potential Index		127
Support Payments/Cash Contributions/Gifts in Kind: Total $		$105,499,870
Average Spent		$3,414.12
Spending Potential Index		137
Travel: Total $		$90,952,128
Average Spent		$2,943.34
Spending Potential Index		137
Vehicle Maintenance & Repairs: Total $		$43,180,314
Average Spent		$1,397.38
Spending Potential Index		130

Data Note: Consumer spending shows the amount spent on a variety of goods and services by households that reside in the area. Expenditures are shown by broad budget categories that are not mutually exclusive. Consumer spending does not equal business revenue. Total and Average Amount Spent Per Household represent annual figures. The Spending Potential Index represents the amount spent in the area relative to a national average of 100.
Source: Consumer Spending data are derived from the 2015 and 2016 Consumer Expenditure Surveys, Bureau of Labor Statistics. Esri.
Source: U.S. Census Bureau, Census 2010 Summary File 1. Esri forecasts for 2018 and 2023 Esri converted Census 2000 data into 2010 geography.

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Demographic and Income Profile

James City County, VA
James City County, VA (51095)
Geography: County

ESRI BAO Market and Demographic 2018,

Summary	Census 2010	2018	2023
Population	67,009	77,427	84,624
Households	26,860	30,901	33,723
Families	19,557	22,269	24,194
Average Household Size	2.45	2.47	2.48
Owner Occupied Housing Units	20,429	24,857	27,468
Renter Occupied Housing Units	6,431	6,044	6,255
Median Age	44.9	47.3	48.3
Trends: 2018 - 2023 Annual Rate	**Area**	**State**	**National**
Population	1.79%	0.83%	0.83%
Households	1.76%	0.78%	0.79%
Families	1.67%	0.70%	0.71%
Owner HHs	2.02%	1.08%	1.16%
Median Household Income	3.06%	2.81%	2.50%

	2018		2023	
Households by Income	Number	Percent	Number	Percent
<$15,000	1,797	5.8%	1,587	4.7%
$15,000 - $24,999	1,916	6.2%	1,672	5.0%
$25,000 - $34,999	1,906	6.2%	1,681	5.0%
$35,000 - $49,999	3,053	9.9%	2,831	8.4%
$50,000 - $74,999	5,085	16.5%	4,978	14.8%
$75,000 - $99,999	4,276	13.8%	4,577	13.6%
$100,000 - $149,999	6,374	20.6%	7,828	23.2%
$150,000 - $199,999	2,991	9.7%	3,691	10.9%
$200,000+	3,503	11.3%	4,878	14.5%
Median Household Income	$83,244		$96,788	
Average Household Income	$109,518		$129,157	
Per Capita Income	$44,149		$51,873	

	Census 2010		2018		2023	
Population by Age	Number	Percent	Number	Percent	Number	Percent
0 - 4	3,461	5.2%	3,616	4.7%	3,859	4.6%
5 - 9	3,852	5.7%	4,038	5.2%	4,293	5.1%
10 - 14	4,295	6.4%	4,421	5.7%	4,651	5.5%
15 - 19	4,120	6.1%	4,215	5.4%	4,427	5.2%
20 - 24	3,350	5.0%	3,856	5.0%	3,651	4.3%
25 - 34	6,391	9.5%	8,078	10.4%	8,688	10.3%
35 - 44	8,133	12.1%	8,312	10.7%	9,750	11.5%
45 - 54	9,974	14.9%	10,062	13.0%	9,727	11.5%
55 - 64	9,563	14.3%	11,536	14.9%	12,163	14.4%
65 - 74	7,705	11.5%	10,573	13.7%	12,334	14.6%
75 - 84	4,401	6.6%	6,130	7.9%	7,979	9.4%
85+	1,764	2.6%	2,590	3.3%	3,102	3.7%

	Census 2010		2018		2023	
Race and Ethnicity	Number	Percent	Number	Percent	Number	Percent
White Alone	53,792	80.3%	60,590	78.3%	64,615	76.4%
Black Alone	8,805	13.1%	10,345	13.4%	11,491	13.6%
American Indian Alone	197	0.3%	322	0.4%	413	0.5%
Asian Alone	1,506	2.2%	2,268	2.9%	3,026	3.6%
Pacific Islander Alone	55	0.1%	60	0.1%	64	0.1%
Some Other Race Alone	924	1.4%	1,365	1.8%	1,772	2.1%
Two or More Races	1,730	2.6%	2,477	3.2%	3,243	3.8%
Hispanic Origin (Any Race)	3,024	4.5%	4,504	5.8%	5,769	6.8%

Data Note: Income is expressed in current dollars.

Source: U.S. Census Bureau, Census 2010 Summary File 1. Esri forecasts for 2018 and 2023.

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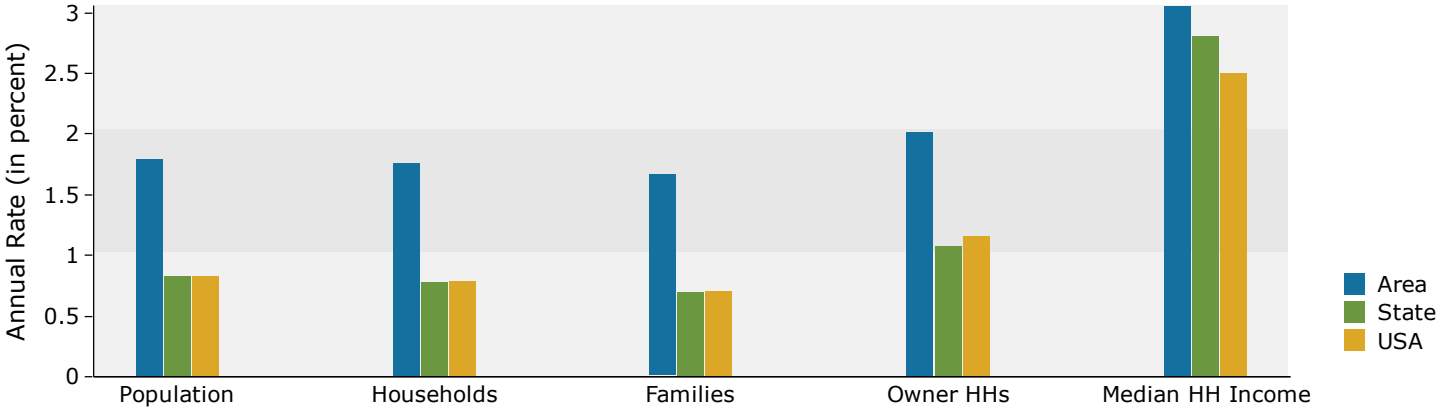
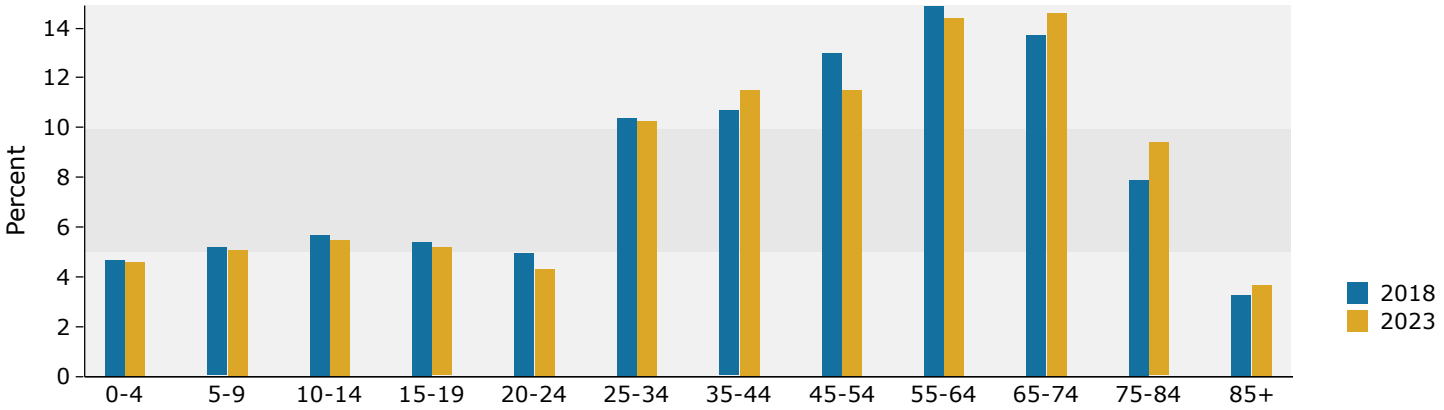
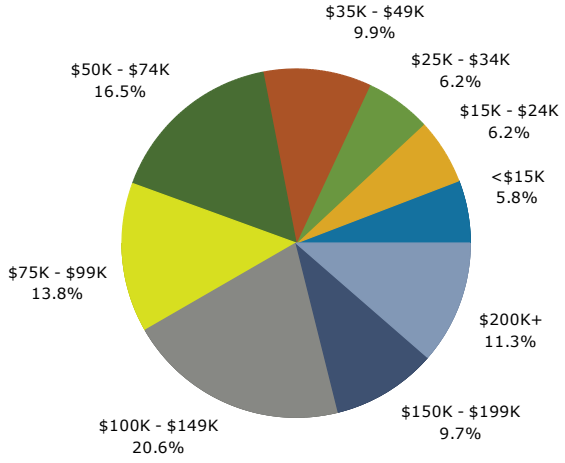
Trends 2018-2023



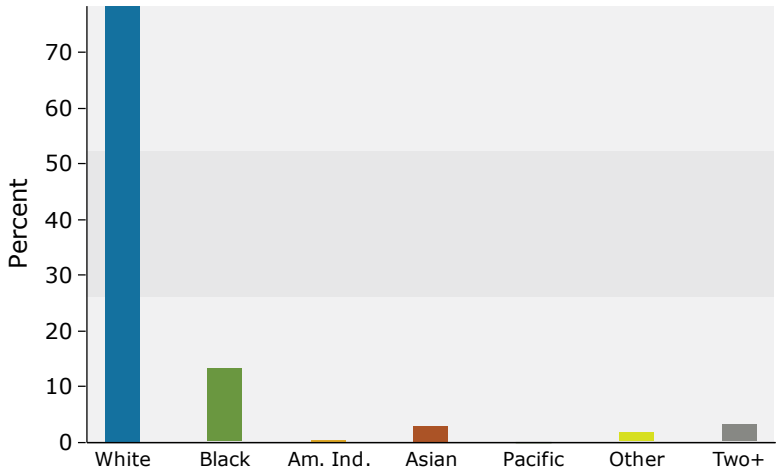
Population by Age



2018 Household Income



2018 Population by Race



2018 Percent Hispanic Origin: 5.8%

Source: U.S. Census Bureau, Census 2010 Summary File 1. Esri forecasts for 2018 and 2023.

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Detailed Age Profile

James City County, VA
James City County, VA (51095)
Geography: County

ESRI BAO Market and Demographic 2018,

Summary	Census 2010	2018	2023	2018-2023 Change	2018-2023 Annual Rate
Population	67,009	77,427	84,624	7,197	1.79%
Households	26,860	30,901	33,723	2,822	1.76%
Average Household Size	2.45	2.47	2.48	0.01	0.08%

	Census 2010		2018		2023	
Total Population by Detailed Age	Number	Percent	Number	Percent	Number	Percent
Total	67,009	100.0%	77,427	100.0%	84,624	100.0%
<1	653	1.0%	698	0.9%	742	0.9%
1	635	0.9%	662	0.9%	702	0.8%
2	697	1.0%	728	0.9%	780	0.9%
3	745	1.1%	768	1.0%	822	1.0%
4	731	1.1%	760	1.0%	813	1.0%
5	690	1.0%	754	1.0%	807	1.0%
6	753	1.1%	797	1.0%	849	1.0%
7	757	1.1%	799	1.0%	848	1.0%
8	845	1.3%	857	1.1%	911	1.1%
9	807	1.2%	831	1.1%	878	1.0%
10	860	1.3%	884	1.1%	936	1.1%
11	901	1.3%	891	1.2%	939	1.1%
12	818	1.2%	878	1.1%	919	1.1%
13	828	1.2%	866	1.1%	904	1.1%
14	888	1.3%	902	1.2%	953	1.1%
15	900	1.3%	901	1.2%	951	1.1%
16	966	1.4%	931	1.2%	980	1.2%
17	911	1.4%	862	1.1%	906	1.1%
18	746	1.1%	796	1.0%	835	1.0%
19	597	0.9%	725	0.9%	755	0.9%
20 - 24	3,350	5.0%	3,856	5.0%	3,651	4.3%
25 - 29	3,278	4.9%	4,010	5.2%	3,973	4.7%
30 - 34	3,113	4.6%	4,068	5.3%	4,715	5.6%
35 - 39	3,735	5.6%	4,213	5.4%	4,930	5.8%
40 - 44	4,398	6.6%	4,099	5.3%	4,820	5.7%
45 - 49	5,045	7.5%	4,764	6.2%	4,568	5.4%
50 - 54	4,929	7.4%	5,298	6.8%	5,159	6.1%
55 - 59	4,754	7.1%	5,805	7.5%	5,707	6.7%
60 - 64	4,809	7.2%	5,731	7.4%	6,456	7.6%
65 - 69	4,393	6.6%	5,785	7.5%	6,529	7.7%
70 - 74	3,312	4.9%	4,788	6.2%	5,805	6.9%
75 - 79	2,578	3.8%	3,663	4.7%	4,751	5.6%
80 - 84	1,823	2.7%	2,467	3.2%	3,228	3.8%
85+	1,764	2.6%	2,590	3.3%	3,102	3.7%
<18	14,385	21.5%	14,769	19.1%	15,640	18.5%
18+	52,624	78.5%	62,658	80.9%	68,984	81.5%
21+	50,660	75.6%	60,361	78.0%	66,648	78.8%
Median Age	44.9		47.3		48.3	

Source: U.S. Census Bureau, Census 2010 Summary File 1. Esri forecasts for 2018 and 2023.

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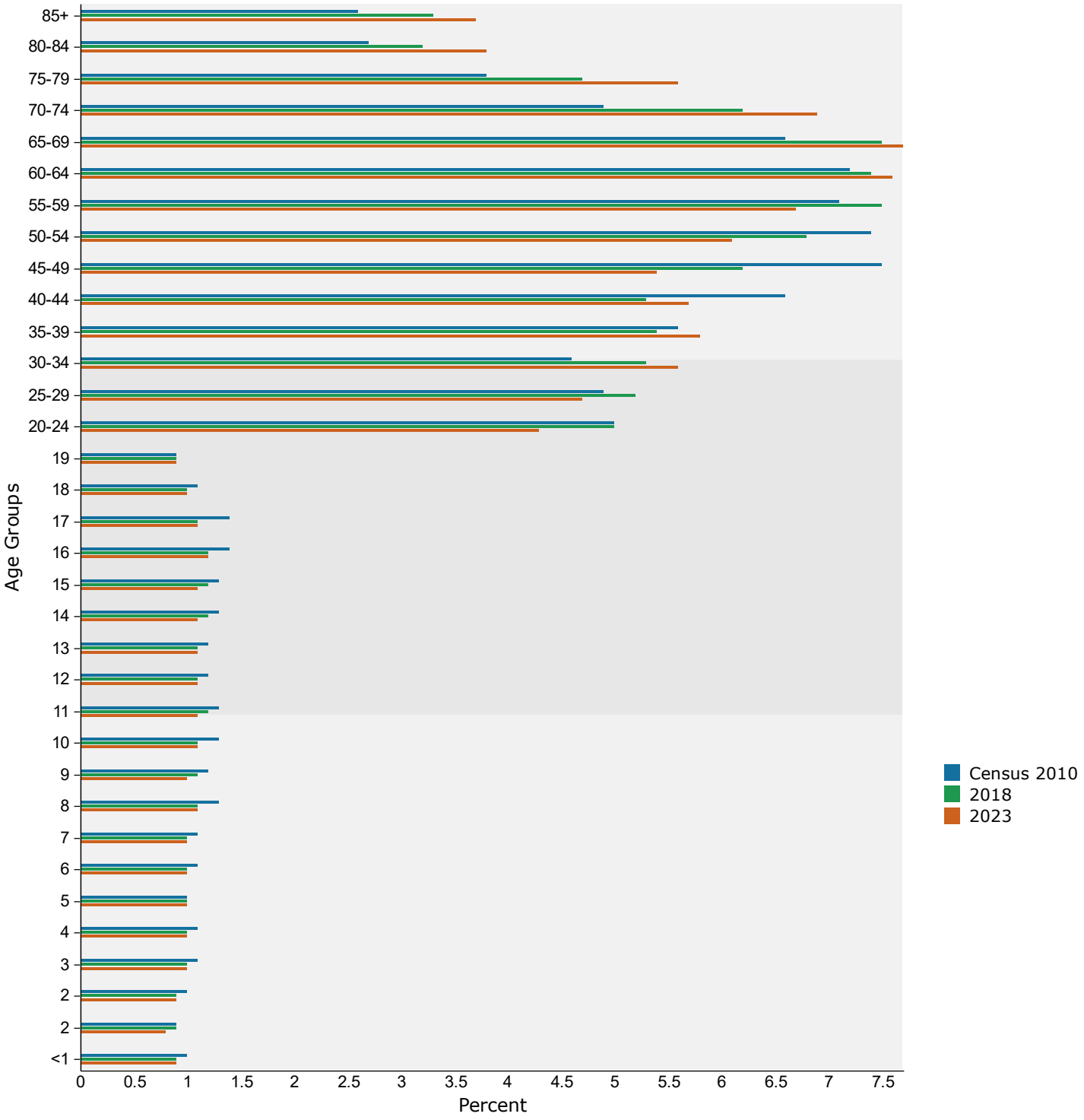
Total Population by Detailed Age



Source: U.S. Census Bureau, Census 2010 Summary File 1. Esri forecasts for 2018 and 2023.

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Detailed Age Profile

James City County, VA
James City County, VA (51095)
Geography: County

ESRI BAO Market and Demographic 2018,

	Census 2010		2018		2023	
Male Population by Detailed Age	Number	Percent	Number	Percent	Number	Percent
Total	32,346	100.0%	37,386	100.0%	40,893	100.0%
<1	315	1.0%	359	1.0%	381	0.9%
1	339	1.0%	345	0.9%	369	0.9%
2	372	1.2%	370	1.0%	399	1.0%
3	380	1.2%	399	1.1%	427	1.0%
4	353	1.1%	369	1.0%	395	1.0%
5	336	1.0%	371	1.0%	394	1.0%
6	389	1.2%	406	1.1%	432	1.1%
7	404	1.2%	411	1.1%	438	1.1%
8	411	1.3%	429	1.1%	456	1.1%
9	412	1.3%	424	1.1%	447	1.1%
10	463	1.4%	460	1.2%	485	1.2%
11	473	1.5%	446	1.2%	471	1.2%
12	433	1.3%	456	1.2%	479	1.2%
13	389	1.2%	427	1.1%	444	1.1%
14	471	1.5%	457	1.2%	484	1.2%
15	496	1.5%	482	1.3%	507	1.2%
16	480	1.5%	468	1.3%	491	1.2%
17	490	1.5%	465	1.2%	486	1.2%
18	385	1.2%	413	1.1%	432	1.1%
19	310	1.0%	372	1.0%	383	0.9%
20 - 24	1,678	5.2%	2,013	5.4%	1,909	4.7%
25 - 29	1,633	5.0%	2,022	5.4%	2,045	5.0%
30 - 34	1,507	4.7%	1,984	5.3%	2,368	5.8%
35 - 39	1,800	5.6%	2,026	5.4%	2,378	5.8%
40 - 44	2,099	6.5%	2,001	5.4%	2,362	5.8%
45 - 49	2,401	7.4%	2,293	6.1%	2,226	5.4%
50 - 54	2,356	7.3%	2,494	6.7%	2,453	6.0%
55 - 59	2,206	6.8%	2,737	7.3%	2,681	6.6%
60 - 64	2,243	6.9%	2,667	7.1%	3,011	7.4%
65 - 69	1,993	6.2%	2,680	7.2%	3,015	7.4%
70 - 74	1,633	5.0%	2,228	6.0%	2,711	6.6%
75 - 79	1,260	3.9%	1,727	4.6%	2,207	5.4%
80 - 84	802	2.5%	1,149	3.1%	1,446	3.5%
85+	634	2.0%	1,036	2.8%	1,281	3.1%
<18	7,406	22.9%	7,544	20.2%	7,985	19.5%
18+	24,940	77.1%	29,842	79.8%	32,908	80.5%
21+	23,918	73.9%	28,645	76.6%	31,697	77.5%
Median Age	43.5		45.7		46.3	

Source: U.S. Census Bureau, Census 2010 Summary File 1. Esri forecasts for 2018 and 2023.

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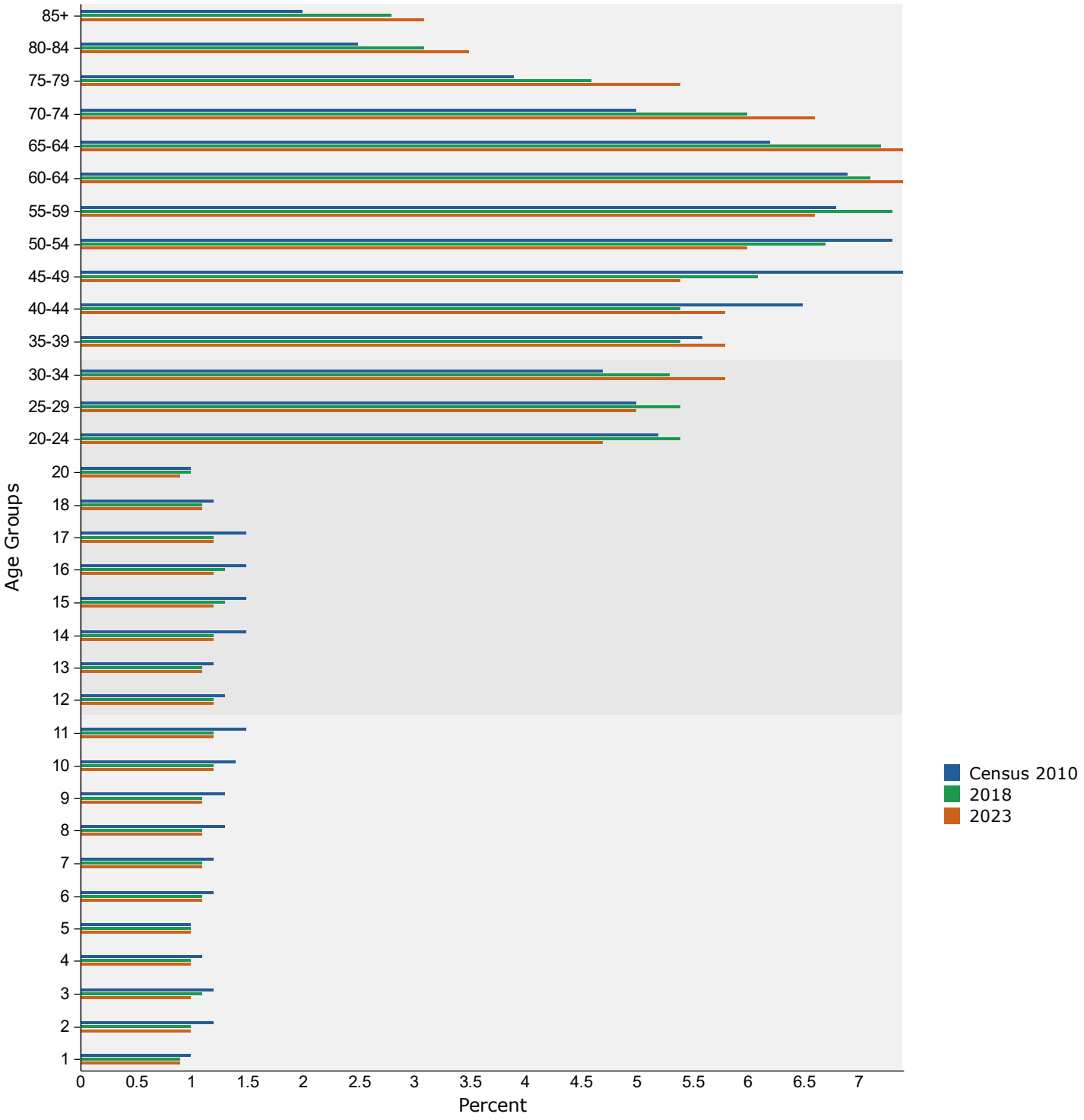
Male Population by Detailed Age



Source: U.S. Census Bureau, Census 2010 Summary File 1. Esri forecasts for 2018 and 2023.

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Detailed Age Profile

James City County, VA
James City County, VA (51095)
Geography: County

ESRI BAO Market and Demographic 2018,

	Census 2010		2018		2023	
Female Population by Detailed Age	Number	Percent	Number	Percent	Number	Percent
Total	34,663	100.0%	40,041	100.0%	43,731	100.0%
<1	338	1.0%	339	0.8%	361	0.8%
1	296	0.9%	317	0.8%	333	0.8%
2	325	0.9%	358	0.9%	381	0.9%
3	365	1.1%	369	0.9%	395	0.9%
4	378	1.1%	391	1.0%	418	1.0%
5	354	1.0%	383	1.0%	413	0.9%
6	364	1.1%	391	1.0%	417	1.0%
7	353	1.0%	388	1.0%	410	0.9%
8	434	1.3%	428	1.1%	455	1.0%
9	395	1.1%	407	1.0%	431	1.0%
10	397	1.1%	424	1.1%	451	1.0%
11	428	1.2%	445	1.1%	468	1.1%
12	385	1.1%	422	1.1%	440	1.0%
13	439	1.3%	439	1.1%	460	1.1%
14	417	1.2%	445	1.1%	469	1.1%
15	404	1.2%	419	1.0%	444	1.0%
16	486	1.4%	463	1.2%	489	1.1%
17	421	1.2%	397	1.0%	420	1.0%
18	361	1.0%	383	1.0%	403	0.9%
19	287	0.8%	353	0.9%	372	0.9%
20 - 24	1,672	4.8%	1,843	4.6%	1,742	4.0%
25 - 29	1,645	4.7%	1,988	5.0%	1,928	4.4%
30 - 34	1,606	4.6%	2,084	5.2%	2,347	5.4%
35 - 39	1,935	5.6%	2,187	5.5%	2,552	5.8%
40 - 44	2,299	6.6%	2,098	5.2%	2,458	5.6%
45 - 49	2,644	7.6%	2,471	6.2%	2,342	5.4%
50 - 54	2,573	7.4%	2,804	7.0%	2,706	6.2%
55 - 59	2,548	7.4%	3,068	7.7%	3,026	6.9%
60 - 64	2,566	7.4%	3,064	7.7%	3,445	7.9%
65 - 69	2,400	6.9%	3,105	7.8%	3,514	8.0%
70 - 74	1,679	4.8%	2,560	6.4%	3,094	7.1%
75 - 79	1,318	3.8%	1,936	4.8%	2,544	5.8%
80 - 84	1,021	2.9%	1,318	3.3%	1,782	4.1%
85+	1,130	3.3%	1,554	3.9%	1,821	4.2%
<18	6,979	20.1%	7,225	18.0%	7,655	17.5%
18+	27,684	79.9%	32,816	82.0%	36,076	82.5%
21+	26,742	77.1%	31,716	79.2%	34,951	79.9%
Median Age	46.0		48.8		50.1	

Source: U.S. Census Bureau, Census 2010 Summary File 1. Esri forecasts for 2018 and 2023.

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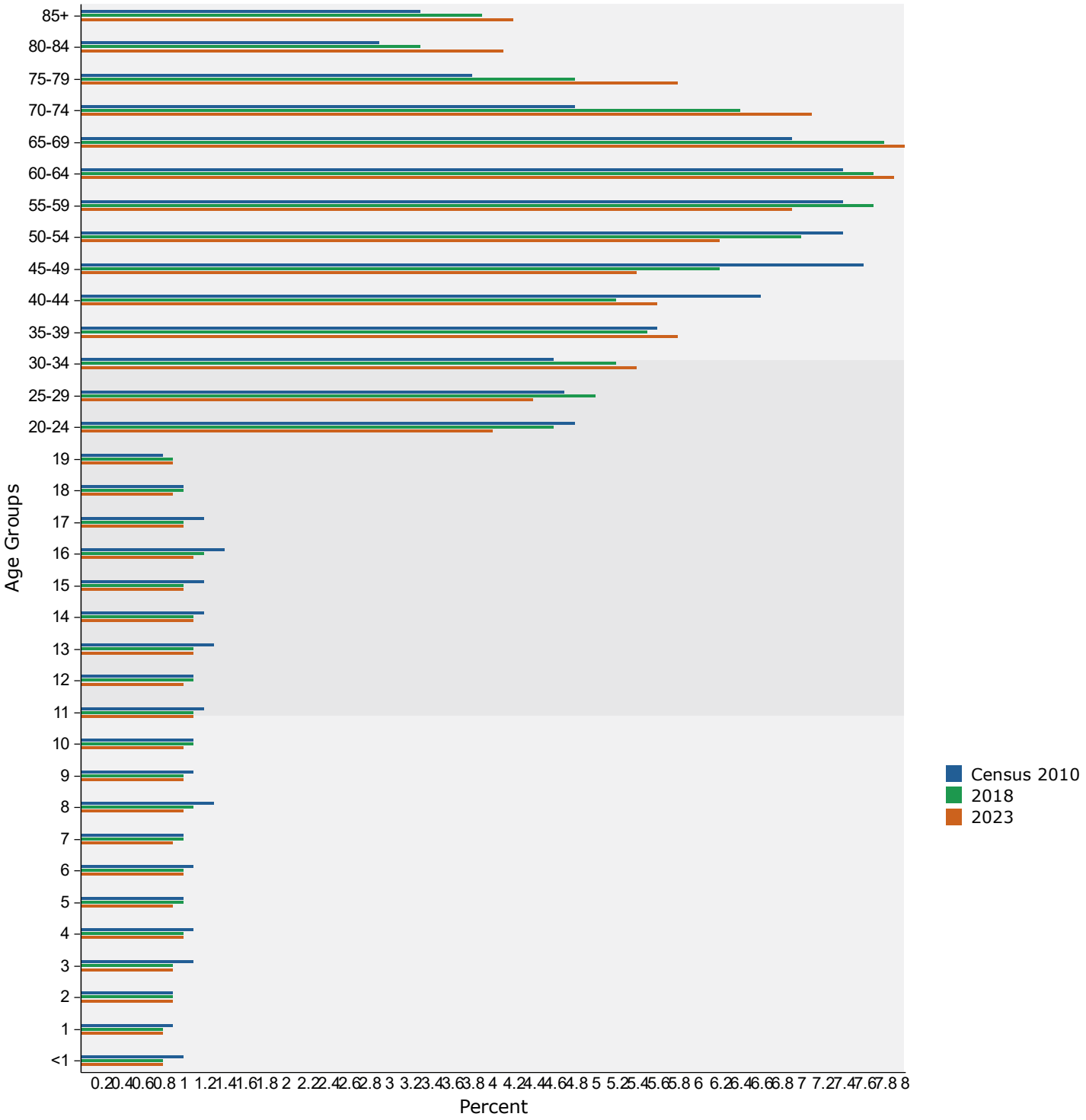
Female Population by Detailed Age



Source: U.S. Census Bureau, Census 2010 Summary File 1. Esri forecasts for 2018 and 2023.

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Market Profile

James City County, VA
James City County, VA (51095)
Geography: County

ESRI BAO Market and Demographic 2018,

	James City Co...
Population Summary	
2000 Total Population	48,102
2010 Total Population	67,009
2018 Total Population	77,427
2018 Group Quarters	1,078
2023 Total Population	84,624
2018-2023 Annual Rate	1.79%
2018 Total Daytime Population	70,987
Workers	28,123
Residents	42,864
Household Summary	
2000 Households	19,003
2000 Average Household Size	2.47
2010 Households	26,860
2010 Average Household Size	2.45
2018 Households	30,901
2018 Average Household Size	2.47
2023 Households	33,723
2023 Average Household Size	2.48
2018-2023 Annual Rate	1.76%
2010 Families	19,557
2010 Average Family Size	2.85
2018 Families	22,269
2018 Average Family Size	2.90
2023 Families	24,194
2023 Average Family Size	2.92
2018-2023 Annual Rate	1.67%
Housing Unit Summary	
2000 Housing Units	20,772
Owner Occupied Housing Units	70.5%
Renter Occupied Housing Units	21.0%
Vacant Housing Units	8.5%
2010 Housing Units	29,797
Owner Occupied Housing Units	68.6%
Renter Occupied Housing Units	21.6%
Vacant Housing Units	9.9%
2018 Housing Units	34,319
Owner Occupied Housing Units	72.4%
Renter Occupied Housing Units	17.6%
Vacant Housing Units	10.0%
2023 Housing Units	37,533
Owner Occupied Housing Units	73.2%
Renter Occupied Housing Units	16.7%
Vacant Housing Units	10.2%
Median Household Income	
2018	$83,244
2023	$96,788
Median Home Value	
2018	$365,767
2023	$403,028
Per Capita Income	
2018	$44,149
2023	$51,873
Median Age	
2010	44.9
2018	47.3
2023	48.3

Data Note: Household population includes persons not residing in group quarters. Average Household Size is the household population divided by total households. Persons in families include the householder and persons related to the householder by birth, marriage, or adoption. Per Capita Income represents the income received by all persons aged 15 years and over divided by the total population.

Source: U.S. Census Bureau, Census 2010 Summary File 1. Esri forecasts for 2018 and 2023 Esri converted Census 2000 data into 2010 geography.

November 30, 2018

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	James City Co...
2018 Households by Income	
Household Income Base	30,901
<$15,000	5.8%
$15,000 - $24,999	6.2%
$25,000 - $34,999	6.2%
$35,000 - $49,999	9.9%
$50,000 - $74,999	16.5%
$75,000 - $99,999	13.8%
$100,000 - $149,999	20.6%
$150,000 - $199,999	9.7%
$200,000+	11.3%
Average Household Income	$109,518
2023 Households by Income	
Household Income Base	33,723
<$15,000	4.7%
$15,000 - $24,999	5.0%
$25,000 - $34,999	5.0%
$35,000 - $49,999	8.4%
$50,000 - $74,999	14.8%
$75,000 - $99,999	13.6%
$100,000 - $149,999	23.2%
$150,000 - $199,999	10.9%
$200,000+	14.5%
Average Household Income	$129,157
2018 Owner Occupied Housing Units by Value	
Total	24,857
<$50,000	2.4%
$50,000 - $99,999	1.1%
$100,000 - $149,999	3.3%
$150,000 - $199,999	7.9%
$200,000 - $249,999	10.7%
$250,000 - $299,999	10.6%
$300,000 - $399,999	21.4%
$400,000 - $499,999	14.4%
$500,000 - $749,999	18.5%
$750,000 - $999,999	6.4%
$1,000,000 - $1,499,999	2.6%
$1,500,000 - $1,999,999	0.5%
$2,000,000 +	0.4%
Average Home Value	$432,803
2023 Owner Occupied Housing Units by Value	
Total	27,468
<$50,000	1.8%
$50,000 - $99,999	0.8%
$100,000 - $149,999	2.5%
$150,000 - $199,999	6.2%
$200,000 - $249,999	9.1%
$250,000 - $299,999	9.3%
$300,000 - $399,999	19.7%
$400,000 - $499,999	15.1%
$500,000 - $749,999	22.1%
$750,000 - $999,999	8.7%
$1,000,000 - $1,499,999	3.3%
$1,500,000 - $1,999,999	0.6%
$2,000,000 +	0.5%
Average Home Value	$477,042

Data Note: Income represents the preceding year, expressed in current dollars. Household income includes wage and salary earnings, interest dividends, net rents, pensions, SSI and welfare payments, child support, and alimony.
Source: U.S. Census Bureau, Census 2010 Summary File 1. Esri forecasts for 2018 and 2023 Esri converted Census 2000 data into 2010 geography.

November 30, 2018

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	James City Co...
2010 Population by Age	
Total	67,009
0 - 4	5.2%
5 - 9	5.7%
10 - 14	6.4%
15 - 24	11.1%
25 - 34	9.5%
35 - 44	12.1%
45 - 54	14.9%
55 - 64	14.3%
65 - 74	11.5%
75 - 84	6.6%
85 +	2.6%
18 +	78.5%
2018 Population by Age	
Total	77,427
0 - 4	4.7%
5 - 9	5.2%
10 - 14	5.7%
15 - 24	10.4%
25 - 34	10.4%
35 - 44	10.7%
45 - 54	13.0%
55 - 64	14.9%
65 - 74	13.7%
75 - 84	7.9%
85 +	3.3%
18 +	80.9%
2023 Population by Age	
Total	84,624
0 - 4	4.6%
5 - 9	5.1%
10 - 14	5.5%
15 - 24	9.5%
25 - 34	10.3%
35 - 44	11.5%
45 - 54	11.5%
55 - 64	14.4%
65 - 74	14.6%
75 - 84	9.4%
85 +	3.7%
18 +	81.5%
2010 Population by Sex	
Males	32,346
Females	34,663
2018 Population by Sex	
Males	37,386
Females	40,041
2023 Population by Sex	
Males	40,893
Females	43,731

Source: U.S. Census Bureau, Census 2010 Summary File 1. Esri forecasts for 2018 and 2023 Esri converted Census 2000 data into 2010 geography.

November 30, 2018

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	James City Co...
2010 Population by Race/Ethnicity	
Total	67,009
White Alone	80.3%
Black Alone	13.1%
American Indian Alone	0.3%
Asian Alone	2.2%
Pacific Islander Alone	0.1%
Some Other Race Alone	1.4%
Two or More Races	2.6%
Hispanic Origin	4.5%
Diversity Index	39.5
2018 Population by Race/Ethnicity	
Total	77,427
White Alone	78.3%
Black Alone	13.4%
American Indian Alone	0.4%
Asian Alone	2.9%
Pacific Islander Alone	0.1%
Some Other Race Alone	1.8%
Two or More Races	3.2%
Hispanic Origin	5.8%
Diversity Index	43.8
2023 Population by Race/Ethnicity	
Total	84,624
White Alone	76.4%
Black Alone	13.6%
American Indian Alone	0.5%
Asian Alone	3.6%
Pacific Islander Alone	0.1%
Some Other Race Alone	2.1%
Two or More Races	3.8%
Hispanic Origin	6.8%
Diversity Index	47.4
2010 Population by Relationship and Household Type	
Total	67,009
In Households	98.4%
In Family Households	84.7%
Householder	29.2%
Spouse	24.2%
Child	27.3%
Other relative	2.6%
Nonrelative	1.4%
In Nonfamily Households	13.7%
In Group Quarters	1.6%
Institutionalized Population	1.4%
Noninstitutionalized Population	0.2%

Data Note: Persons of Hispanic Origin may be of any race. The Diversity Index measures the probability that two people from the same area will be from different race/ethnic groups.
Source: U.S. Census Bureau, Census 2010 Summary File 1. Esri forecasts for 2018 and 2023 Esri converted Census 2000 data into 2010 geography.

November 30, 2018

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	James City Co...
2018 Population 25+ by Educational Attainment	
Total	57,281
Less than 9th Grade	2.2%
9th - 12th Grade, No Diploma	3.3%
High School Graduate	16.6%
GED/Alternative Credential	1.8%
Some College, No Degree	18.1%
Associate Degree	7.9%
Bachelor's Degree	27.6%
Graduate/Professional Degree	22.5%
2018 Population 15+ by Marital Status	
Total	65,352
Never Married	24.0%
Married	59.7%
Widowed	6.2%
Divorced	10.1%
2018 Civilian Population 16+ in Labor Force	
Civilian Employed	97.1%
Civilian Unemployed (Unemployment Rate)	2.9%
2018 Employed Population 16+ by Industry	
Total	34,289
Agriculture/Mining	0.8%
Construction	6.2%
Manufacturing	5.8%
Wholesale Trade	1.7%
Retail Trade	11.4%
Transportation/Utilities	3.0%
Information	1.5%
Finance/Insurance/Real Estate	4.8%
Services	57.8%
Public Administration	7.0%
2018 Employed Population 16+ by Occupation	
Total	34,289
White Collar	66.2%
Management/Business/Financial	17.0%
Professional	27.3%
Sales	11.0%
Administrative Support	10.9%
Services	20.2%
Blue Collar	13.6%
Farming/Forestry/Fishing	0.5%
Construction/Extraction	4.3%
Installation/Maintenance/Repair	3.0%
Production	2.5%
Transportation/Material Moving	3.4%
2010 Population By Urban/ Rural Status	
Total Population	67,009
Population Inside Urbanized Area	84.1%
Population Inside Urbanized Cluster	0.0%
Rural Population	15.9%

Source: U.S. Census Bureau, Census 2010 Summary File 1. Esri forecasts for 2018 and 2023 Esri converted Census 2000 data into 2010 geography.

November 30, 2018

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	James City Co...
2010 Households by Type	
Total	26,860
Households with 1 Person	21.9%
Households with 2+ People	78.1%
Family Households	72.8%
Husband-wife Families	60.3%
With Related Children	21.4%
Other Family (No Spouse Present)	12.5%
Other Family with Male Householder	3.0%
With Related Children	1.7%
Other Family with Female Householder	9.5%
With Related Children	6.2%
Nonfamily Households	5.2%
All Households with Children	29.6%
Multigenerational Households	3.0%
Unmarried Partner Households	4.2%
Male-female	3.6%
Same-sex	0.6%
2010 Households by Size	
Total	26,860
1 Person Household	21.9%
2 Person Household	42.3%
3 Person Household	15.5%
4 Person Household	12.9%
5 Person Household	4.9%
6 Person Household	1.6%
7 + Person Household	0.8%
2010 Households by Tenure and Mortgage Status	
Total	26,860
Owner Occupied	76.1%
Owned with a Mortgage/Loan	56.5%
Owned Free and Clear	19.5%
Renter Occupied	23.9%
2010 Housing Units By Urban/ Rural Status	
Total Housing Units	29,797
Housing Units Inside Urbanized Area	85.2%
Housing Units Inside Urbanized Cluster	0.0%
Rural Housing Units	14.8%

Data Note: Households with children include any households with people under age 18, related or not. Multigenerational households are families with 3 or more parent-child relationships. Unmarried partner households are usually classified as nonfamily households unless there is another member of the household related to the householder. Multigenerational and unmarried partner households are reported only to the tract level. Esri estimated block group data, which is used to estimate polygons or non-standard geography.
Source: U.S. Census Bureau, Census 2010 Summary File 1. Esri forecasts for 2018 and 2023 Esri converted Census 2000 data into 2010 geography.

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		James City Co...
Top 3 Tapestry Segments		
	1.	Silver & Gold (9A)
	2.	Exurbanites (1E)
	3.	Comfortable Empty Nesters
2018 Consumer Spending		
Apparel & Services: Total $		$84,973,596
Average Spent		$2,749.87
Spending Potential Index		126
Education: Total $		$57,209,347
Average Spent		$1,851.38
Spending Potential Index		128
Entertainment/Recreation: Total $		$130,196,891
Average Spent		$4,213.36
Spending Potential Index		131
Food at Home: Total $		$195,140,058
Average Spent		$6,315.01
Spending Potential Index		126
Food Away from Home: Total $		$139,009,788
Average Spent		$4,498.55
Spending Potential Index		128
Health Care: Total $		$238,015,736
Average Spent		$7,702.53
Spending Potential Index		135
HH Furnishings & Equipment: Total $		$85,575,453
Average Spent		$2,769.34
Spending Potential Index		133
Personal Care Products & Services: Total $		$33,980,744
Average Spent		$1,099.66
Spending Potential Index		133
Shelter: Total $		$660,949,246
Average Spent		$21,389.25
Spending Potential Index		127
Support Payments/Cash Contributions/Gifts in Kind: Total $		$105,499,870
Average Spent		$3,414.12
Spending Potential Index		137
Travel: Total $		$90,952,128
Average Spent		$2,943.34
Spending Potential Index		137
Vehicle Maintenance & Repairs: Total $		$43,180,314
Average Spent		$1,397.38
Spending Potential Index		130

Data Note: Consumer spending shows the amount spent on a variety of goods and services by households that reside in the area. Expenditures are shown by broad budget categories that are not mutually exclusive. Consumer spending does not equal business revenue. Total and Average Amount Spent Per Household represent annual figures. The Spending Potential Index represents the amount spent in the area relative to a national average of 100.
Source: Consumer Spending data are derived from the 2015 and 2016 Consumer Expenditure Surveys, Bureau of Labor Statistics. Esri.
Source: U.S. Census Bureau, Census 2010 Summary File 1. Esri forecasts for 2018 and 2023 Esri converted Census 2000 data into 2010 geography.

November 30, 2018

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ACS Housing Summary

James City County, VA
James City County, VA (51095)
Geography: County

ESRI BAO Market and Demographic 2018,

	2012-2016 ACS Estimate	Percent	MOE(±)	Reliability
TOTALS				
Total Population	71,900		0	high
Total Households	28,352		517	high
Total Housing Units	31,835		119	high
OWNER-OCCUPIED HOUSING UNITS BY MORTGAGE STATUS				
Total	21,308	100.0%	514	high
Housing units with a mortgage/contract to purchase/similar debt	14,603	68.5%	569	high
Second mortgage only	559	2.6%	151	medium
Home equity loan only	2,297	10.8%	317	high
Both second mortgage and home equity loan	71	0.3%	67	low
No second mortgage and no home equity loan	11,676	54.8%	594	high
Housing units without a mortgage	6,705	31.5%	462	high
AVERAGE VALUE BY MORTGAGE STATUS				
Housing units with a mortgage	$352,635		$28,497	high
Housing units without a mortgage	$379,747		$49,198	high
OWNER-OCCUPIED HOUSING UNITS BY MORTGAGE STATUS & SELECTED MONTHLY OWNER COSTS				
Total	21,308	100.0%	514	high
With a mortgage: Monthly owner costs as a percentage of household income in past 12 months				
Less than 10.0 percent	935	4.4%	194	medium
10.0 to 14.9 percent	2,427	11.4%	354	high
15.0 to 19.9 percent	2,686	12.6%	304	high
20.0 to 24.9 percent	2,608	12.2%	364	high
25.0 to 29.9 percent	1,609	7.6%	267	high
30.0 to 34.9 percent	1,291	6.1%	264	medium
35.0 to 39.9 percent	754	3.5%	242	medium
40.0 to 49.9 percent	797	3.7%	196	medium
50.0 percent or more	1,439	6.8%	232	high
Not computed	57	0.3%	54	low
Without a mortgage: Monthly owner costs as a percentage of household income in past 12 months				
Less than 10.0 percent	3,925	18.4%	399	high
10.0 to 14.9 percent	1,101	5.2%	244	medium
15.0 to 19.9 percent	486	2.3%	142	medium
20.0 to 24.9 percent	285	1.3%	151	medium
25.0 to 29.9 percent	272	1.3%	109	medium
30.0 to 34.9 percent	135	0.6%	66	medium
35.0 to 39.9 percent	100	0.5%	68	low
40.0 to 49.9 percent	148	0.7%	99	low
50.0 percent or more	197	0.9%	96	medium
Not computed	56	0.3%	53	low

Source: U.S. Census Bureau, 2012-2016 American Community Survey

Reliability: high medium low

November 30, 2018

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ACS Housing Summary

James City County, VA
James City County, VA (51095)
Geography: County

ESRI BAO Market and Demographic 2018,

	2012-2016 ACS Estimate	Percent	MOE(±)	Reliability
RENTER-OCCUPIED HOUSING UNITS BY CONTRACT RENT				
Total	7,044	100.0%	523	high
With cash rent	6,475	91.9%	501	high
Less than $100	50	0.7%	66	low
$100 to $149	0	0.0%	28	
$150 to $199	12	0.2%	20	low
$200 to $249	41	0.6%	39	low
$250 to $299	0	0.0%	28	
$300 to $349	68	1.0%	49	low
$350 to $399	0	0.0%	28	
$400 to $449	188	2.7%	180	low
$450 to $499	70	1.0%	64	low
$500 to $549	133	1.9%	112	low
$550 to $599	8	0.1%	14	low
$600 to $649	427	6.1%	223	medium
$650 to $699	221	3.1%	151	low
$700 to $749	178	2.5%	89	medium
$750 to $799	258	3.7%	148	medium
$800 to $899	638	9.1%	163	medium
$900 to $999	675	9.6%	191	medium
$1,000 to $1,249	868	12.3%	191	medium
$1,250 to $1,499	953	13.5%	200	medium
$1,500 to $1,999	886	12.6%	230	medium
$2,000 to $2,499	258	3.7%	124	medium
$2,500 to $2,999	212	3.0%	178	low
$3,000 to $3,499	138	2.0%	72	medium
$3,500 or more	193	2.7	79	medium
No cash rent	569	8.1%	206	medium
Median Contract Rent	$1,078		$81	high
Average Contract Rent	$1,269		$148	high
RENTER-OCCUPIED HOUSING UNITS BY INCLUSION OF UTILITIES IN RENT				
Total	7,044	100.0%	523	high
Pay extra for one or more utilities	6,050	85.9%	538	high
No extra payment for any utilities	994	14.1%	209	medium

Source: U.S. Census Bureau, 2012-2016 American Community Survey

Reliability: high medium low

November 30, 2018

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ACS Housing Summary

James City County, VA
James City County, VA (51095)
Geography: County

ESRI BAO Market and Demographic 2018,

	2012-2016 ACS Estimate	Percent	MOE(±)	Reliability
HOUSING UNITS BY UNITS IN STRUCTURE				
Total	31,835	100.0%	119	high
1, detached	21,333	67.0%	523	high
1, attached	3,982	12.5%	323	high
2	461	1.4%	242	medium
3 or 4	547	1.7%	175	medium
5 to 9	1,669	5.2%	340	medium
10 to 19	1,461	4.6%	351	medium
20 to 49	353	1.1%	156	medium
50 or more	844	2.7%	171	medium
Mobile home	1,185	3.7%	230	high
Boat, RV, van, etc.	0	0.0%	28	
HOUSING UNITS BY YEAR STRUCTURE BUILT				
Total	31,835	100.0%	119	high
Built 2014 or later	191	0.6%	76	medium
Built 2010 to 2013	1,215	3.8%	216	high
Built 2000 to 2009	9,437	29.6%	567	high
Built 1990 to 1999	7,180	22.6%	503	high
Built 1980 to 1989	6,939	21.8%	576	high
Built 1970 to 1979	3,722	11.7%	445	high
Built 1960 to 1969	1,529	4.8%	258	high
Built 1950 to 1959	808	2.5%	208	medium
Built 1940 to 1949	410	1.3%	189	medium
Built 1939 or earlier	404	1.3%	165	medium
Median Year Structure Built	1993		1	high
OCCUPIED HOUSING UNITS BY YEAR HOUSEHOLDER MOVED INTO UNIT				
Total	28,352	100.0%	517	high
Owner occupied				
Moved in 2015 or later	528	1.9%	120	medium
Moved in 2010 to 2014	4,491	15.8%	400	high
Moved in 2000 to 2009	9,707	34.2%	531	high
Moved in 1990 to 1999	3,896	13.7%	388	high
Moved in 1980 to 1989	1,468	5.2%	219	high
Moved in 1979 or earlier	1,218	4.3%	229	high
Renter occupied				
Moved in 2015 or later	612	2.2%	181	medium
Moved in 2010 to 2014	4,400	15.5%	502	high
Moved in 2000 to 2009	1,496	5.3%	322	medium
Moved in 1990 to 1999	333	1.2%	124	medium
Moved in 1980 to 1989	132	0.5%	87	low
Moved in 1979 or earlier	71	0.3%	72	low
Median Year Householder Moved Into Unit	2006		1	high

Source: U.S. Census Bureau, 2012-2016 American Community Survey

Reliability: high medium low

November 30, 2018

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ACS Housing Summary

James City County, VA
James City County, VA (51095)
Geography: County

ESRI BAO Market and Demographic 2018,

	2012-2016 ACS Estimate	Percent	MOE(±)	Reliability
OCCUPIED HOUSING UNITS BY HOUSE HEATING FUEL				
Total	28,352	100.0%	517	
Utility gas	13,549	47.8%	487	
Bottled, tank, or LP gas	667	2.4%	196	
Electricity	13,144	46.4%	671	
Fuel oil, kerosene, etc.	594	2.1%	158	
Coal or coke	0	0.0%	28	
Wood	270	1.0%	125	
Solar energy	0	0.0%	28	
Other fuel	44	0.2%	39	
No fuel used	84	0.3%	68	
OCCUPIED HOUSING UNITS BY VEHICLES AVAILABLE				
Total	28,352	100.0%	517	
Owner occupied				
No vehicle available	309	1.1%	111	
1 vehicle available	4,576	16.1%	413	
2 vehicles available	10,041	35.4%	482	
3 vehicles available	4,493	15.8%	390	
4 vehicles available	1,350	4.8%	220	
5 or more vehicles available	539	1.9%	154	
Renter occupied				
No vehicle available	640	2.3%	164	
1 vehicle available	3,237	11.4%	431	
2 vehicles available	2,712	9.6%	431	
3 vehicles available	275	1.0%	129	
4 vehicles available	156	0.6%	107	
5 or more vehicles available	24	0.1%	42	
Average Number of Vehicles Available	2.0		0.1	

Data Note: N/A means not available.

2012-2016 ACS Estimate: The American Community Survey (ACS) replaces census sample data. Esri is releasing the 2012-2016 ACS estimates, five-year period data collected monthly from January 1, 2010 through December 31, 2014. Although the ACS includes many of the subjects previously covered by the decennial census sample, there are significant differences between the two surveys including fundamental differences in survey design and residency rules.

Margin of error (MOE): The MOE is a measure of the variability of the estimate due to sampling error. MOEs enable the data user to measure the range of uncertainty for each estimate with 90 percent confidence. The range of uncertainty is called the confidence interval, and it is calculated by taking the estimate +/- the MOE. For example, if the ACS reports an estimate of 100 with an MOE of +/- 20, then you can be 90 percent certain the value for the whole population falls between 80 and 120.

Reliability: These symbols represent threshold values that Esri has established from the Coefficients of Variation (CV) to designate the usability of the estimates. The CV measures the amount of sampling error relative to the size of the estimate, expressed as a percentage.

- High Reliability: Small CVs (less than or equal to 12 percent) are flagged green to indicate that the sampling error is small relative to the estimate and the estimate is reasonably reliable.
- Medium Reliability: Estimates with CVs between 12 and 40 are flagged yellow-use with caution.
- Low Reliability: Large CVs (over 40 percent) are flagged red to indicate that the sampling error is large relative to the estimate. The estimate is considered very unreliable.

Source: U.S. Census Bureau, 2012-2016 American Community Survey

Reliability: high medium low

November 30, 2018

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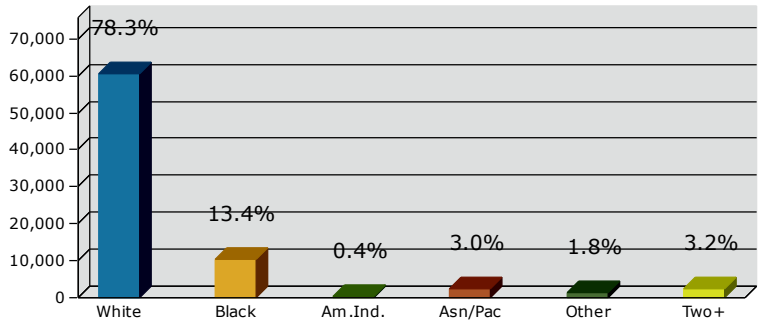
Graphic Profile

James City County, VA
James City County, VA (51095)
Geography: County

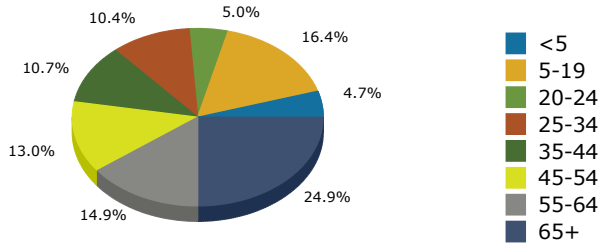
ESRI BAO Market and Demographic 2018,

2018 Population by Race

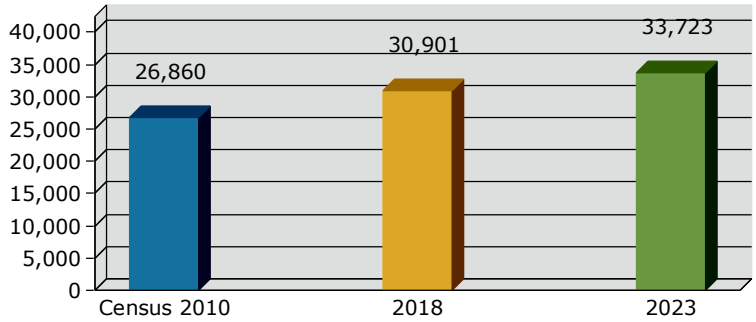


2018 Percent Hispanic Origin:5.8%

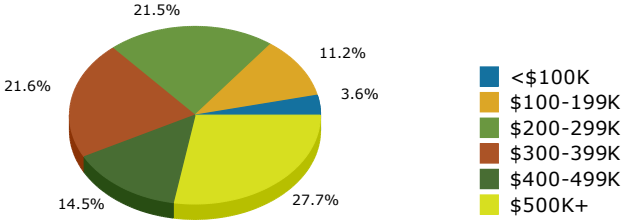
2018 Population by Age



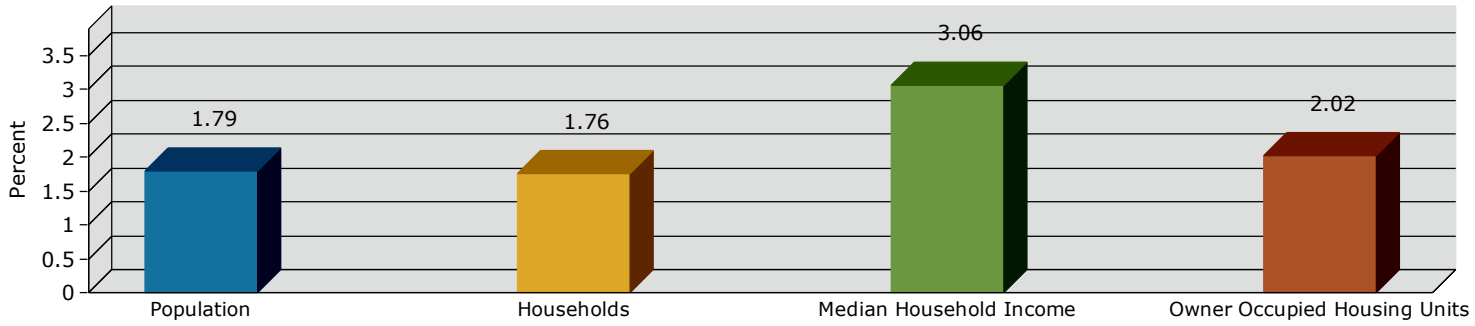
Households



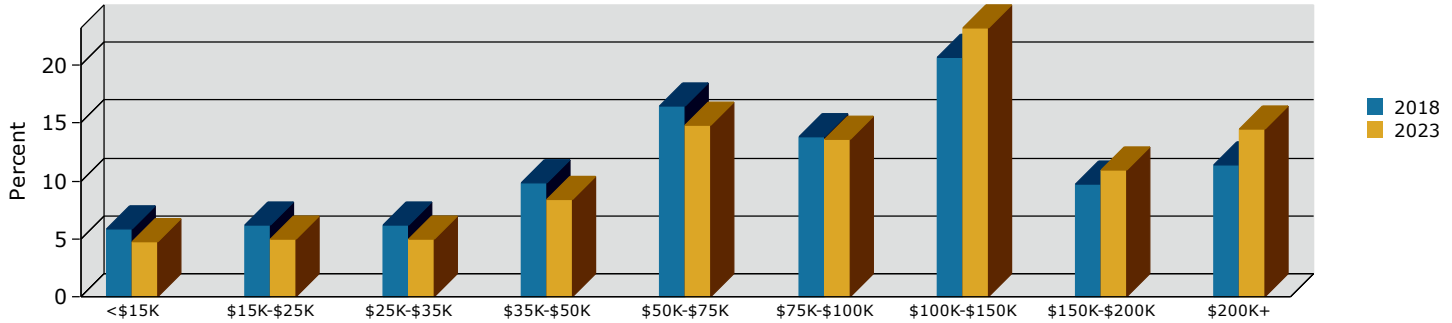
2018 Home Value



2018-2023 Annual Growth Rate



Household Income



Source: U.S. Census Bureau, Census 2010 Summary File 1. Esri forecasts for 2018 and 2023.

November 30, 2018

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GREATER WILLIAMSBURG PARTNERSHIP

GREATER WILLIAMSBURG TARGET SECTOR ANALYSIS

GREATER WILLIAMSBURG, VIRGINA

Submitted by Market Street Services Inc.
www.marketstreetservices.com

August 16, 2016

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INTRODUCTION

The Greater Williamsburg region has taken an important step in charting its own path towards economic diversification and sustainability with the formation of the Greater Williamsburg Partnership. As the Greater Williamsburg Partnership seeks to market the region to site selectors and business executives charged with location decisions, this report is designed to assist the Partnership in identifying its target audiences as well as provide actionable recommendations to recruit new businesses into the Greater Williamsburg region. The Greater Williamsburg Target Sector Analysis should also be used to guide business retention, expansion, and development activities at the economic development authorities of the City of Williamsburg, James City County, and York County. It is important to view this work as a first step, a beginning.

Greater Williamsburg's value proposition to prospective businesses is significantly enhanced by its asset base, which any of its peers would envy. The College of William & Mary, Thomas Nelson Community College, a robust scientific and engineering talent pool attracted to nearby premier national research and development laboratories, distinct identity, numerous place-based amenities and entertainment attractions, and sizable military instillations combine to yield competitive advantages for businesses seeking to relocate into the region. These attributes are further complemented by new initiatives, such as the Launchpad incubator, which advances the region's attractiveness to new businesses.

Promulgating the region's value proposition is not, however, without challenge. Given the Greater Williamsburg reputation as a destination for travelers and tourists, the core task ahead of the Greater Williamsburg Partnership will be to complement current tourism messaging while shifting perceptions among national and international business communities that Greater Williamsburg is also a destination to locate and grow operations. As the Greater Williamsburg region seeks to enhance its attractiveness, new opportunities may lay outside of its historic economic borders.

For much of its recent economic development history, the Greater Williamsburg region has largely identified with the Hampton Roads Corridor. While the regional economy is unquestionably interconnected to economic activity occurring in the Hampton Roads Corridor, the Greater Williamsburg region is now better positioned to leverage its proximity to the Greater Richmond region – potentially expanding its marketable opportunities. Greater Richmond affords access to a robust professional services workforce as well as an emerging young professional population that Greater Williamsburg can leverage among companies seeking access to both blue collar and white collar workforces. The Historic Triangle Collaborative 2010 report on economic diversification set the stage for this effort.

There is no better time for the Greater Williamsburg region to identify and market its competitive economic development strengths and diversify its mix of businesses and companies. Throughout the Great Recession and recovery undiversified regional economies suffered from sharper employment declines and prolonged economic recoveries. Sequestration and tightening federal spending on research and development further impacted regional economies strongly connected to federal investment. By attracting new companies of all sizes that offer high earnings opportunities to the region, the Greater Williamsburg

Partnership has the capacity to reduce the region's historic dependency on tourism and defense and place the regional economy on a sustainable path.

OUR APPROACH TO TARGETING

A target sector, or simply a "target," is any type of business activity that an economic development organization and its partners strategically pursue for quality growth and development. In other words, a target is an area where financial and staff resources – and the programs and policies they support – are specifically focused. Targets are often those segments of the economy where there are existing competitive advantages and strong possibilities for growth and return on investment. Some communities, sometimes universally, choose to target sectors that are not presently concentrated in their community or characterized by an existing competitive advantage. In some cases, this is because the area of activity is rapidly expanding or exhibits the potential to do so, while other communities select targets that align with other strategic objectives in the community. **Given the focus on economic development marketing, however, this report will ultimately classify targets as those areas of activity that have the greatest potential to lead to quality job growth and increased investment in the community in the next five years.**

It is important to note that some business sectors that are already important sources of local employment are not necessarily targets. At the core, targeted economic development supports a net increase in prosperity for a community and its residents, which necessitates "exporting" goods and services. Economic activities related to travel and tourism fall into a similar but different category. When individuals visit a community for business, a trade show or a vacation, they bring in outside wealth in the form of spending on hotels, restaurants, entertainment, and so forth. However, growing travel and tourism business requires a special approach that is typically handled by a "destination marketing organization." This is the case locally, where the Greater Williamsburg Chamber and Tourism Alliance works to attract all manner of visitors to Greater Williamsburg, each whom could be a potential resident, employer, or investor. **Since tourism will remain an important economic driver for the Greater Williamsburg area over the next five years, it is treated as a "target" with the caveat that much of the Partnership's role in targeting tourism will be only through support of ongoing tourism marketing and development efforts.**

Businesses that can sell a product or service to a consumer or end user outside of the Greater Williamsburg region – whether abroad or in some other region in the United States – bring new wealth into the community that did not previously exist. This wealth then recirculates in the local economy, creating even more jobs and wealth. Economists refer to jobs in export-oriented sectors as "traded" or "basic employment." By contrast, sectors such as retail, food service, and health care are said to "follow rooftops." That is, they tend to serve local populations and typically expand as a result of population growth. Their potential to bring in significant wealth from outside the community is limited. **And as such, sectors like health care and retail are consider targets only in regions that are attracting significant numbers of outsiders to utilize these services.** For instance, Rochester, Minnesota has a focus on "destination healthcare" due to the fact that people travel from all over the world to visit the Mayo Clinic. There is no

evidence to suggest that similar activities are taking place in Greater Williamsburg to the extent that they would warrant a "targeted" approach.

KEY CONCEPTS RELATED TO TARGET SECTOR DEVELOPMENT

CLUSTERS: Agglomerations – or "clusters" – represent groups of interrelated businesses that choose to co-locate. The historical growth of clustered economic activity in areas such as the Silicon Valley, Route 128 in Massachusetts, and the Research Triangle Park in North Carolina are well-developed case studies to which many other regions across the nation refer as they strive to develop similar agglomerations. There are countless examples of such clusters around the country and the world. Clustering can occur among competing or cooperative firms for a variety of different reasons. For instance, a group of suppliers may choose to locate in proximity to a major manufacturer for research and development efficiencies and reduced transportation costs. Another example is the immense aerospace cluster developed around the Boeing Integrated Defense Systems operations in St. Louis, Missouri. Other firms may co-locate in a specific area in order to take advantage of a specialized labor pool or to be in close proximity to specific infrastructure.

While the factors that have led to clustering vary tremendously by region and sector, such agglomerations occur over time because a location has an asset base that affords the sector and the companies that operate within them some form of competitive advantage. The competitive advantages derived by these firms often result in comparatively high potential for employment growth and wealth creation. As the cluster grows, so too do the benefits afforded to the companies within the cluster: the available workforce grows, the potential for collaboration expands, competition may drive down costs, and buyer and supplier networks expand, among other potential impacts.

TARGETS: A targeted sector – or simply a **"target"**– is any type of business activity that is strategically pursued by an economic development organization and its partners for quality growth and development. That is to say, a "target" is an area where financial and staff resources, and the programs and policies they support, are specifically focused. "Targets" are often those segments of an economy where competitive advantages exist, prospects for future growth are greatest, and return on investment is likely highest. A "target" can be a single business sector with high growth potential or a "cluster" of businesses in related sectors. Many communities choose to target business sectors that are not presently concentrated in their community or characterized by existing competitive advantages. This may be because such activities are rapidly expanding, exhibit potential to become clusters in the years and decades to come, or align with other strategic objectives of the community. The ultimate aim of "targeting" is not necessarily to create new clusters of business activity – communities with multiple clusters are rare and tend to be among the nation's largest and most dynamic economies.

STRATEGIC CONSIDERATIONS FOR TARGET SECTOR DEVELOPMENT

UNDERSTANDING YOUR ASSET BASE: Strategic targeting is predicated upon a solid understanding of a community's strengths and weaknesses, specifically as they relate to the needs of specific business sectors and the companies that operate within them. The factors that medium to large companies consider when

evaluating a community as a potential location for a new facility are often referred to as site location factors, site selection factors, or site considerations. These factors vary tremendously by sector. For example, data center operations typically seek locations with low natural disaster risk, affordable and abundant water necessary for cooling, and redundant and exceptional fiber-optic infrastructure, among other attributes. Corporate headquarters typically seek locations with a well-educated workforce, exceptional passenger air connectivity, and abundant amenities. Accordingly, communities that are able to offer such characteristics are better positioned to attract these kinds of operations. Understanding the community's asset base – inclusive of a wide variety of these potential site location factors – is critical to understanding the community's competitiveness for various business sectors. Likewise, an understanding of its deficiencies in terms of such site location factors will help the community identify areas that need further investment if the community wishes to transform such deficiencies into future assets.

A HOLISTIC APPROACH: In many cases, targeted business sectors reflect existing clusters of establishments with similar business activities that have likely flourished in a community because of an asset base that aligns with that sector's primary site location considerations. Other sectors that share similar site location factors may not currently be concentrated in the community, but the aforementioned asset base could make the community an attractive location for these new activities. Accordingly, such sectors represent opportunities where the community may have a particularly high chance for success in marketing and recruitment efforts that seek to attract new corporate investments or relocations that would benefit from the community's existing asset base.

For decades many communities and their economic development organizations have exclusively associated "economic development" with "business recruitment." While the recruitment of new companies is an important component of any targeted economic development program, it is only "one leg of the stool." The growth of regional economies and their target business sectors are overwhelmingly driven by existing businesses and entrepreneurs. While new investments generate ribbon cuttings and headlines, a variety of studies have shown that the majority of the country's job creation over various time periods has been attributable to the expansion of existing companies. Accordingly, any effort to develop target sectors and nurture employment growth within them must focus upon the needs of existing businesses as well as entrepreneurs.

Holistic economic development must also focus on developing the community or region's asset base that supports the competitiveness of target business sectors and the companies that operate within them. This is necessary to alleviate barriers to expansion for existing companies and mitigate any potential risks that could lead to layoffs or business closures. But such strategies that focus on developing the community's asset base also contribute to long-term viability of the community as a location for a more diverse array of sectors, including sectors that the community is not currently competitive for in today's climate but which it hopes to develop in future decades.

TARGET SECTOR ANALYSIS: APPROACH AND METHODS

There are many methods used to identify economic development targets. Some approaches are based on incomplete or strictly industry-focused (business sector-focused) methodologies. Such methodologies ignore a variety of important issues from workforce attributes to educational assets to geographic advantages, all of which are vital to businesses. *Market Street's* approach to target identification is rooted in a more complete examination of the region's strengths and opportunities, including talent – the occupations and types of knowledge that support the region's business activities. This comprehensive, interrelated approach stands in contrast to the traditional "top down" approach long utilized in cluster identification and analysis. It recognizes the importance of talent and workforce sustainability to the business community. It is complemented by an evaluation of the region's business climate, networks, infrastructure, research assets, educational programs, and many other factors that influence site location decisions.

CLASSIFICATION: Our approach does not define targets strictly based on North American Industry Classification System (NAICS) codes or Standard Occupational Classification (SOC) codes. Though these codes are used to help quantify important trends and activity within each target, they should not be interpreted as rigid definitions of the composition of economic activity within a given target. Classification systems do not adequately capture certain niche technologies and opportunities that may deserve strategic attention in certain communities.

GEOGRAPHY: The research related to business composition within this report is based on an analysis of trends observed in the Greater Williamsburg region, which includes the City of Williamsburg, James City County, and York County. The research related to occupational composition within this report is based on analysis of trends observed for all zip codes within a 50-minute commute shed of Greater Williamsburg.

LOCATION QUOTIENTS: Location quotients (LQs) are used to measure the relative concentration of local employment in a given business sector or occupation. When applied to business sector employment, they measure the ratio of a business sector's share of total local employment to that business sector's share of total national employment. A business sector with LQ of 1.0 is exactly the same share of total local employment as that business sector's share of national employment. When a local business sector has a location quotient greater than 1.0, it signals that the sector is more heavily concentrated locally than it is nationwide. Those sectors with high LQs are often assumed to benefit from one or more sources of local competitive advantage. Location quotients can also be applied to occupational employment in the same manner that they are applied to business sector employment, helping to determine which occupations and corresponding skill sets – irrespective of the business sectors that employ them – are highly concentrated in the local workforce.

INTER-INDUSTRY LINKAGES: Data covering inter-industry purchases provides insight into the degree to which firms benefit from co-location and the ability to purchase products and services from local suppliers. When firms purchase goods from suppliers outside the region, money is leaving the region. When this leakage is reduced, employment and income multipliers rise. That is to say, when leakage is reduced and clustered firms are sourcing locally, the economic impact of each new job created is maximized.

DATA SOURCES: Unless otherwise noted, all quantitative data contained in this report is sourced from Economic Modeling Specialists International (EMSI), an industry-leading provider of proprietary data, aggregated from public sources such as the U.S. Census Bureau, the U.S. Bureau of Labor Statistics, the U.S. Bureau of Economic Analysis, the National Center for Education Statistics, CareerBuilder, and many others.

Public input – including that which was gathered via focus groups, interviews, and an online survey – is differentiated throughout the report and presented in bold red text.

TARGET SECTOR ANALYSIS

Based on an extensive analysis of Greater Williamsburg's economic position and assets, *Market Street* recommends five, top-level target sectors for the community to pursue as a means to diversify the economy and to attract quality jobs and investment in the next five years. Within these sectors, however, are numerous opportunities to leverage Greater Williamsburg's current business and occupational mix as well as emerging opportunities in order to tailor economic development messaging and marketing activities for specific audiences. The proposed sectors are shown in the following graphic.

Greater Williamsburg Target Sectors

The five target sectors shown in the graphic represent the sum total of Greater Williamsburg's asset base, business and occupational mix, and long-term opportunities for positive growth and change. The above graphic only tells part of the story however. Under each target sector is a host of current and future niche opportunities that can guide economic development marketing and other related activities in the Greater Williamsburg region over the next five years.

- ✓ The **Advanced Materials & Components** target encompasses companies such as Coresix Precision Glass, Greystone, and Service Metal Fabricators who gain value from proximity to the Port of Virginia, a large potential advanced material and component customer base, and a concentrated metals labor force.
- ✓ The **Food & Beverage** target leverages the Anheuser-Busch InBev Brewery in Greater Williamsburg and the bottling and canning suppliers that have co-located near the brewery. The target also captures food packaging activities as well as rising new food and beverage upstarts.
- ✓ The **Professional & Technical Services** target includes management, engineer, and design consultancies as well as corporate headquarter operations in the Greater Williamsburg region such as Enterprise Holdings, Cybernetics, and the National Center for State Courts.

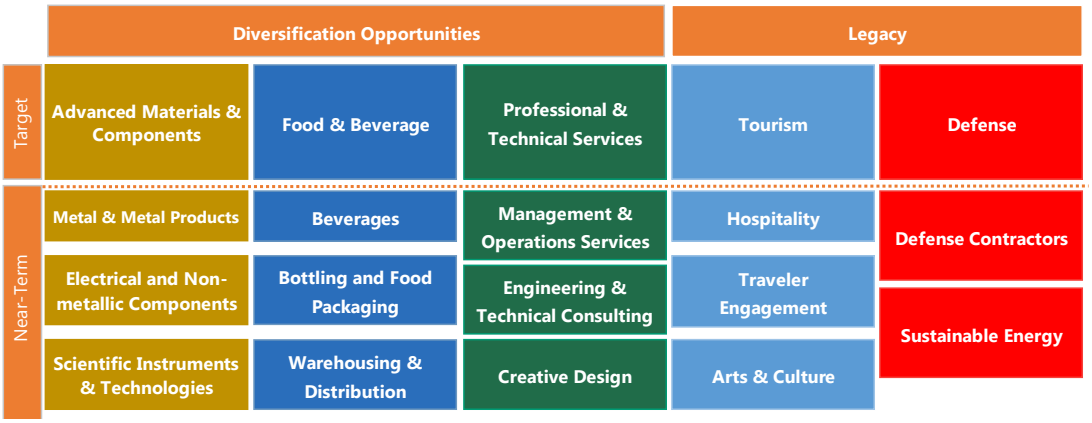
- ✓ The Tourism target is representative of Greater Williamsburg's legacy as a place to travel, recreate, and experience Colonial America.
- ✓ The Defense target captures the activities at Yorktown Naval Station and other military instillations outside of the Greater Williamsburg region. The target further captures private sector defense contractors and other business activities connected to military operations throughout the broader Virginia Beach-Norfolk-Newport News, VA-NC region.

Within each target sector are numerous niche opportunities that capitalize Greater Williamsburg's location, asset base, business and workforce composition, and long-term economic development opportunities.

Niche Opportunities: Near-Term Niches

As the regional economic development marketing organization, the Greater Williamsburg Partnership will actively promote the community's opportunities and resources to a national and international business audience. Promotion activities will leverage those assets currently, or soon to be present, in the region. Thus, Greater Williamsburg's near-term niches reflect the region's present value proposition as it relates to business expansion and recruitment. These near-term opportunities capture the types of businesses activity that the region is capable of attracting over the next five-years.

Near-Term Niche Opportunities



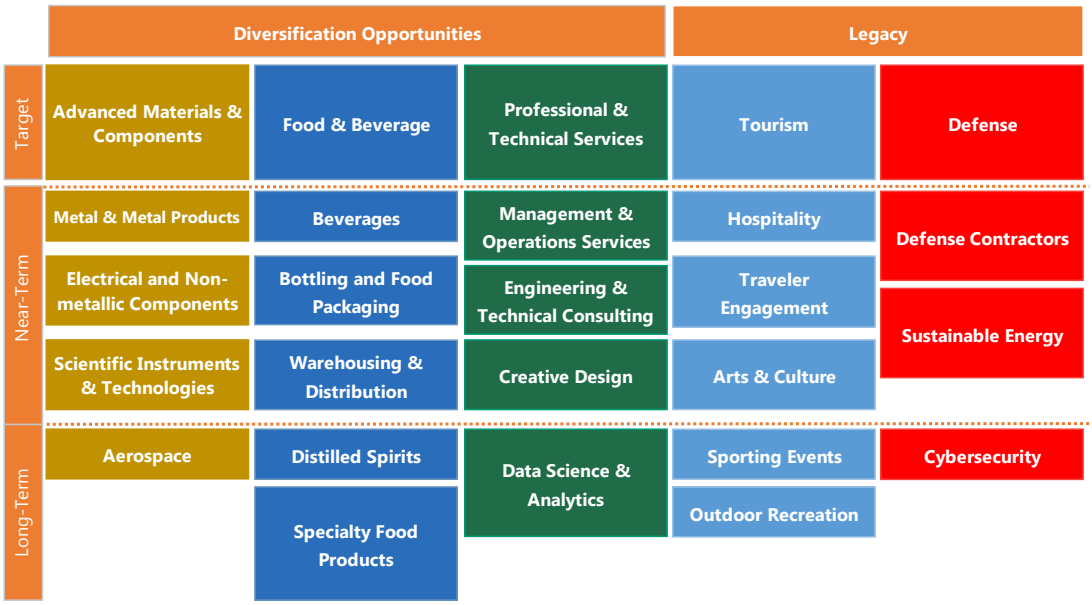
Niche Opportunities: Long-Term Niches

Greater Williamsburg's long-term niche economic development opportunities represent those sectors of the economy which Greater Williamsburg could be competitive for over the next ten to fifteen years. In many respects, promotion of these sectors requires additional investment in infrastructure and workforce capacities to engender an environment conducive to relocating or expanding business operations. For instance, Greater Williamsburg would need to attract or develop home-grown software programmers, software developers, and other information technology professionals to recruit data science and analytics firms beyond those currently operating in the region.

While there is a standing need for information technology professionals in Greater Williamsburg to sustain a data science and analysis sector, capacity is expanding. Programs such as William & Mary's business

analytics and computer science programs as well as the information technology programs offered through Thomas Nelson Community College indicate potential future capacity to supply a skilled workforce desirable to data science and analytics firms.

Long-Term Niche Opportunities



As a whole, the above graphic reflects Greater Williamsburg's current competitive strengths as well as future opportunities to foster competitive advantages in rising sectors of the economy.

GREATER WILLIAMSBURG'S CHANGING ECONOMIC COMPOSITION

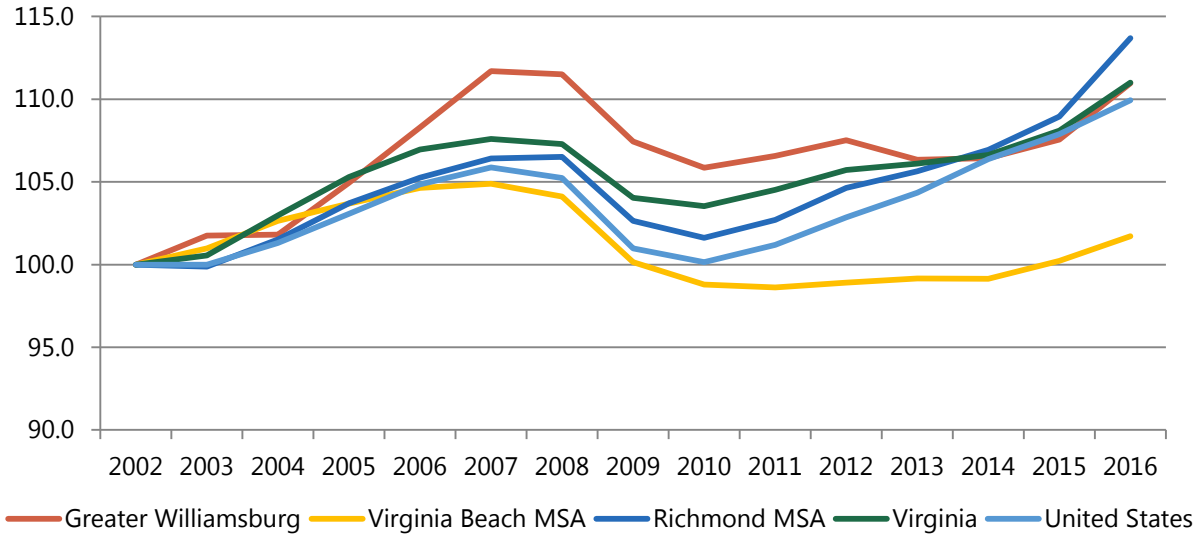
Like many communities throughout the nation, the Great Recession was a critical juncture for Greater Williamsburg. In the five years building up to the recession, Greater Williamsburg's economy grew at a brisk pace - nearly double the national average. From 2002 to the precipice of the recession in 2007, Greater Williamsburg added roughly 7,640 jobs, or a compound annual growth rate of 1.9 percent.[1] Greater Williamsburg's economy was expanding by 1.9 percent each year. In comparison, the national economy grew at a 1.0 percent rate on a compounded annual basis. As the following chart shows, Greater Williamsburg's compound rate of growth before the recession well outpaced the broader Virginia Beach (0.8 percent) and Richmond (1.0 percent) regions as well as commonwealth (1.2 percent), and nation (1.0 percent). **Although Greater Williamsburg witnessed strong growth leading up to the recession, growth trends would not follow it on into the recovery.**

In fact, Greater Williamsburg, like many regions across America, has yet to reach pre-recession peak employment. In 2016, the communities of Williamsburg, James City County, and York County reported

[1] A compound annual growth rate is the average growth rate across a specified period of time. More importantly, compound annual growth rates allow for comparability across two uneven periods of time.

total employment of only 72,452 jobs, approximately 500 jobs below pre-recession peak employment attained in 2007. As a result of the region's prolonged recovery, other comparison geographies are catching up. From 2009 to 2016, average growth in Greater Williamsburg (0.4 percent compound annual growth rate) has underperformed relative to the Richmond region (1.3 percent), commonwealth (0.8 percent), and nation (1.1 percent). Only the Virginia Beach region (0.2 percent) experienced more anemic growth over the last seven years.

Total Employment Index (2002 = 100), 2002-2016



Source: Economic Modeling Specialists Intl. (EMSI)

Underlying Greater Williamsburg's relatively languid recovery are both subtle and substantial changes to the region's economic structure. Put simply, **the sectors of the economy that drove pre-recession employment growth regionally either declined after the recovery or significantly curtailed their contribution to the region's overall economic growth.** Nationally, certain sectors of the economy such as manufacturing, warehousing and distribution, management of companies and enterprises, and accommodation and food services grew more rapidly post-recession compared to their pre-recession growth rates. Greater Williamsburg's economic "new normal" post-recession led to a tepid economic recovery, yielding just 2,295 jobs in the region between 2009 and 2016. Comparing compound annual growth rates, which normalizes growth on a yearly basis, between 2001-2007 and 2009-2016 shows the degree to which growth in certain sectors of the Greater Williamsburg economy slowed post-recession causing the region to underperform relative to the Richmond region, commonwealth of Virginia, and national averages.

For all intents and purposes, Greater Williamsburg's pre-recession economic growth had all the markings of a rapidly diversifying economy. In the five-years prior to the recession (2002-2007), numerous sectors contributed to the region's overall economic growth. Robust growth among management of companies and enterprises (18.9 percent compound annual growth rate); professional, scientific, and technical services (5.6 percent); whole sale trade (7.6 percent); and transportation and

warehousing (8.0 percent) sectors looked to reduce the region's dependence on the tourism thereby placing Greater Williamsburg's economy on a more sustainable growth path. Combined, these four sectors accounted more than a quarter (27.7 percent) of all jobs created prior to the recession. **The Great Recession, compounded by federal budget tightening, fundamentally altered Greater Williamsburg's path toward economic diversification.**

Compound Annual Employment Growth Rate (CAGR), 2002-2016

	CAGR		
	2002-2007	2009-2016	Diff.
Crop and Animal Production	-1.5%	0.0%	1.5%
Mining, Quarrying, and Oil and Gas Extraction	NR	NR	NR
Utilities	-4.3%	-2.4%	1.9%
Construction	3.9%	-0.5%	-4.4%
Manufacturing	-2.6%	-0.1%	2.4%
Wholesale Trade	7.6%	0.4%	-7.2%
Retail Trade	3.2%	0.2%	-3.0%
Transportation and Warehousing	8.0%	4.1%	-4.0%
Information	-1.0%	-2.5%	-1.5%
Finance and Insurance	6.0%	-1.1%	-7.1%
Real Estate and Rental and Leasing	1.9%	0.6%	-1.3%
Professional, Scientific, and Technical Services	5.6%	0.6%	-5.0%
Management of Companies and Enterprises	18.9%	7.7%	-11.2%
Admin./Support/Waste Mgmt./Remediation Services	2.3%	-0.6%	-2.9%
Educational Services	9.1%	2.3%	-6.8%
Health Care and Social Assistance	1.2%	3.7%	2.6%
Arts, Entertainment, and Recreation	-1.1%	2.2%	3.3%
Accommodation and Food Services	1.5%	-0.5%	-2.0%
Other Services (except Public Administration)	1.3%	1.7%	0.4%
Government	0.7%	-1.1%	-1.8%
Unclassified Industry	NR	NR	NR
Total	**1.9%**	**0.4%**	**-1.5%**

Source: Economic Modeling Specialists Intl. (EMSI)

Professional Services Sectors and Cooling Growth

Perhaps one of the highlights of Greater Williamsburg's pre-recession period was the rising professional services sector in Greater Williamsburg.[2] From 2002 to 2007, professional services employment increased by 1,525 jobs, representing compound annual growth rate of 8.9 percent. Professional services growth in Greater Williamsburg was spurred by the relocation of Lumber Liquidator's corporate headquarters as well as rising homegrown information technology and engineering businesses. **Professional services continues to be a growth area for the Greater Williamsburg region post-recession - albeit job growth within the sector is far less effervescent.**

In the seven years after the recession (2009 to 2016), the region's professional services sector added just 746 jobs, representing a 2.2 percent compound annual growth rate. The post-recession slowdown has not been without positive momentum. The relocation of Enterprise Holding fleet management operations in 2013 undoubtedly furnished the sector with positive momentum – making a strong business case for relocating and expanding future corporate operations in Greater Williamsburg. Job posting data from EMSI gives further reason for optimism. Over the last year, an uptick in hiring activity for certain professional services occupations including first-line supervisors of office and administrative workers, customer service representatives, and general and operations managers occurred within the region.

Logistics weakens and Manufacturing strengthens

Logistics employment in Greater Williamsburg experienced a similarly divided fate pre- and post-recession. From 2002 to 2007, the region's logistics employers added roughly 832 jobs, representing a 7.8 percent compound annual growth rate.[3] Post-recession logistics employment grew by just 395 jobs, representing a compound annual growth rate of 2.1 percent from 2009 to 2016. **Limited available land for warehousing operations and rising traffic congestion along Interstate 64 could further impact job creation capacity in the logistics sector.** It is also too soon to tell whether the Panama Canal expansion will positively impact logistics employment in the Greater Williamsburg region. The Port of Virginia is under intense competition from other east coast ports for servicing post-Panamax ships.

Among logistics occupations, hiring for heavy and tractor-trailer truck drivers is healthy post-recession. Over a one-year period, employers advertised an average of 270 unique monthly job postings for heavy and tractor-trailer truck drivers between April 2015 and April 2016. Employer interest for other logistics occupations was less robust over the last year.

In contrast to the logistics sector, Greater Williamsburg's manufacturing sector grew in strength post-recession. From 2002 to 2007, manufacturers in the Greater Williamsburg area shed more than -450 jobs, an annual compounded average decline of 2.7 percent. Post-recession, manufacturing employment in the Greater Williamsburg area declined by just -29 jobs, or -0.1 percent compounded annually. **The improving climate for manufacturers in Greater Williamsburg is a welcome sign given the considerably higher**

[2] In this context, professional services represent professional, scientific, and technical services and management of companies and enterprises employment figures combined.

[3] In this context, logistics represent transportation and warehousing and wholesale trade employment figures combined.

wages earned by manufacturing employees. On average, workers in the manufacturing sector earned $62,610 in wages annually – roughly $27,000 more than the prevailing average annual wage for Greater Williamsburg ($35,448).

Although the manufacturing sector has experienced systemic decline due to globalization and automation in recent history, there are indications that the national manufacturing sector has adjusted. From 2009 to 2016, the nation's manufacturers added more than 505,000 jobs to the economy, an increase of 4.2 percent. Whether the region's manufacturing sector will return to growth because of a more stable national manufacturing environment and uptick in manufacturing-related foreign direct investment remains to be seen. **According to the United States International Trade Administration, more than $1.2 trillion dollars' worth of manufacturing foreign direct investment occurred in the United States in 2016.** In 2009, foreign sources generated just under $700 billion worth of manufacturing investment nationally.

Greater Williamsburg's Legacy Sectors: Government

Along with curtailing job creation in rising sectors of the regional economy, the Great Recession negatively impacted the region's historic economic engines. **As stakeholders highlighted throughout public input, sequestration and continued government cutbacks have impacted federal and state employment levels within the region. Stakeholders also identified that spin-off activity or private sector job creation generated by military and government research operations have not reached full potential.** As a result of the Great Recession, the government sector transitioned from boon to drag.

Five years prior to the recession (2002-2007), the region's government sector grew by almost 700 jobs, growing at a compound annual rate of 1.4 percent. **After the recession, dwindling military employment negatively impacted the government sector's capacity to create jobs within Greater Williamsburg.** From 2009 to 2016, military employment declined by 594 jobs regionally. Taken as a whole, the region's government sector (including state and federal employment) shed more than 1,300 jobs during the recovery – representing a compound annual decline of 1.1 percent.

Not all government employers suffered from flagging growth in the post-recession environment. In fact, one government subsector displayed growth post-recession: state government of education and hospital facilities. After the recession, state education and hospital facilities employment increased by 406 jobs, a percent change of 9.7 percent. William & Mary, Thomas Nelson Community College, and Eastern State Hospital stabilized the government sector regional and could continue to have positive impacts on government employment. Job posting data from ESMI noted an increase in job posting activity from the commonwealth of Virginia and the College of William & Mary.

Falling government employment, particularly in the military sector, underscores the necessity to promote high-wage growth sectors in Greater Williamsburg. In 2016, military personnel in the Greater Williamsburg region earned $18,321 dollars above the regional average. The need to support high wage potential comes at a time when much of the national economy has down-shifted towards lower paying occupations.

Greater Williamsburg's Legacy Sectors: Tourism

There is little question that a fundamental shift has occurred over the last few decades in the commonwealth of Virginia. According to U.S Census Bureau data compiled by the Wall Street Journal, manufacturing represented the largest employment sector in the commonwealth of Virginia in 1990. In 2013, retail trade represented the commonwealth's largest employment sector. **State and regional economies are increasingly being driven by employment sectors that offer relatively low wages to their employees – limiting the potential for economic growth and prosperity in state and regional economies.** Tourism focused economies especially suffer from an abundance of low wage, seasonal employment. Given the region's abundance of historical sites and entertainment attractions, tourism is likely to remain an important economic engine for the Greater Williamsburg region. Moreover, tourism continues to positively impact employment growth regionally.

While tourism employment growth diminished post-recession, the sector has not been drastically impacted by recessionary forces.[4] Prior to the recession (2002-2009) regional tourism employment increased by 647 jobs or 0.9 percent compounded annually. Tourism's post-recession performance is remarkably similar. From 2009 to 2016, tourism employment increased regionally by 557 jobs, an increase of 0.4 percent on a compounded annual basis. What has shifted, however, are the underlying drivers behind Greater Williamsburg's tourism growth: the arts, entertainment, and recreation subsector is counterbalancing job loss in the accommodation and food services subsector post-recession.

During public input, stakeholders expressed concern that shifting consumer tastes and the decline of historical tourism visitation nationally was the health of the region's tourism sector. Many felt the need for Greater Williamsburg to not only diversify its economic base, but also to diversify Greater Williamsburg's tourism product, specifically focusing on sports tourism and attracting visitors from untapped markets across the nation. The recent growth in the region's breweries and distilleries, such as the Virginia Beer Company and AleWerks, are indicative of the types of opportunities that could diversify the region's tourism mix. The region also boasts two renowned 18-hole golf courses that can serve as an additional base for sports tourism promotion – Kingsmill Resort hosts an annual Ladies Professional Golf Association (LPGA) tournament.

If there is one key takeaway from the region's changing economic composition it is this: the Great Recession heavily curtailed economic diversification occurring regionally prior to the recession. Once more, the historic economic drivers of Greater Williamsburg's economy either declined or suffered from anemic growth post-recession.

[4] In this context, tourism represent accommodation and food services and arts, entertainment, and recreation employment figures combined.

GREATER WILLIAMSBURG'S CHANGING OCCUPATIONAL COMPOSITION

Greater Williamsburg's labor shed extends well beyond its administrative boarders. **Within a 50-minute drive time of the Greater Williamsburg region there are approximately 425,000 workers who possess a diverse array of skill-sets.** Similar to those trends already discussed, the region's labor shed remains in a state of recovery. As of 2016, there were approximately 1,735 workers fewer in the catchment area relative to its pre-recession peak in 2008. Despite being below pre-recession levels, it is important to note that Greater Williamsburg's labor shed is expanding post-recession. Occupational employment increased by 3.0 percent from 2009 to 2016. Government sequestration and declining military employment still represent significant drag on the expansion.

Greater Williamsburg's Labor Shed: Occupations in Decline

After the recession, only six occupational categories out of 24 in the Greater Williamsburg labor shed declined post-recession. These six occupational categories, however, had an oversized impact on overall occupational growth in the region's labor shed. Combined employment among these six categories decreased by 6,193 workers post-recession (2009-2016). Of the jobs lost within these six occupational categories military occupations accounted for roughly six out of every ten. As discussed earlier, declining military employment is concerning largely due to the higher earnings potential typically offered to regional military personnel who out-earned their national counterparts.

Declining military employment is not the only concerning trend occurring in the region's broader labor shed. For example, computer and mathematical occupational employment decreased by 439 workers or -4.5 percent. **As the region seeks to grow technology-oriented business and foster innovation, the loss in computer and mathematical occupations could stymie the region's capacity to attract new technology or research and development businesses who utilize these skill sets while also developing new homegrown businesses regionally.** Lower relative average annual wages earned by computer and mathematical occupations in the Greater Williamsburg region could further reduce the region's capacity to attract workers with these skill sets. On average, computer and mathematical occupations in Greater Williamsburg's labor shed earned 2.4 percent below the national average. Lower earnings are not necessarily a negative when the region's cost of living is taken into consideration. While data is not provided specifically for the Greater Williamsburg region, cost of living in the Virginia Beach-Norfolk-Newport News, VA-NC was 5.1 percent below the national average in the first quarter of 2016 according to the Council for Community and Economic Research. **While the Greater Williamsburg region enjoys a lower cost of living, it remains incumbent upon regional employers to reduce "sticker shock" and give financial context to prospective computer and mathematical talent.**

Occupational Employment, 2009-2016

SOC	Description	2016	2016 LQ	Post-Recession Change		Hourly Earnings	U.S. Ratio
				Labor Shed	U.S		
15-0000	Computer and Mathematical Occ.	9,279	0.79	-4.5%	18.5%	$38.41	97.8%
25-0000	Education, Training, and Library Occ.	18,400	0.76	-6.7%	2.8%	$23.45	91.1%
37-0000	Building/Grounds Cleaning/Maint. Occ.	14,371	0.88	-3.2%	8.8%	$11.65	87.8%
45-0000	Farming, Fishing, and Forestry Occ.	993	0.31	-3.2%	9.0%	$11.96	117.7%
47-0000	Construction and Extraction Occ.	21,681	1.13	-0.8%	4.4%	$20.13	93.1%
55-0000	Military Occ.	33,316	5.90	-10.1%	0.3%	$16.92	101.8%
	Total	**426,088**		**3.0%**	**8.9%**	**$19.74**	**94.8%**

Source: Economic Modeling Specialists Intl. (EMSI)

Greater Williamsburg's Labor Shed: Growing Occupations

Although declining military and computer and mathematical employment is a concern for Greater Williamsburg, there are many bright spots occurring throughout the labor shed. Employment growth among life, physical, and social science occupations (13.6 percent) far exceed the national average (7.4 percent). **Robust growth among life, physical, and social science occupations could make the region an attractive destination for companies engaged in research and development activity or require highly specialized skill sets like physicists, chemists, and other scientific occupations including scientific instrument and technology manufacturers.**

As a whole, growth among Greater Williamsburg's labor shed is indicative of an economic recovery – with broad growth occurring across numerous occupational categories. **While growth is occurring throughout many occupational categories, this does not necessarily mean that the regional labor shed is growing in attractiveness to outside businesses compared to average community nationwide.** For instance, management occupations in the regional labor shed grew by just 2.7 percent, well below the national average of 7.2 percent. Compared to the average community nationwide, management occupations in Greater Williamsburg's regional labor shed was roughly 31 percent less concentrated than the national average in 2016. Professional services companies looking to relocate into a region typically seek destinations with high concentrations of management occupations – typically these regions possess a managerial workforce 50 percent more concentrated than the national average. **Slower regional growth compared to the national average signals that Greater Williamsburg's management occupations (the category includes executives; advertising, marketing, promotions, public relations, and sales managers; operations managers; and other managerial positions including food service managers) are not likely to become specialized in the near-term.** Even so, growth among the region's labor force does indicate some occupational areas of specialization.

Occupational Employment, 2009-2016

SOC	Description	2016	2016 LQ	Post-Recession Change: Labor Shed	Post-Recession Change: U.S	Median Hourly Earnings	U.S. Ratio
11-0000	Management Occ.	15,684	0.69	2.7%	7.2%	$45.990	105.5%
13-0000	Business and Financial Operations Occ.	22,968	1.09	8.9%	10.3%	$31.488	99.5%
17-0000	Architecture and Engineering Occ.	12,436	1.78	2.1%	6.4%	$36.839	97.8%
19-0000	Life, Physical, and Social Science Occ.	3,724	1.08	13.6%	7.4%	$32.734	102.6%
21-0000	Community and Social Service Occ.	7,069	1.03	6.3%	11.0%	$19.537	94.3%
23-0000	Legal Occ.	2,232	0.64	3.9%	2.2%	$34.299	80.2%
27-0000	Arts/Design/Entert./Sports/Media Occ.	5,015	0.68	7.3%	7.1%	$17.723	82.6%
29-0000	Healthcare Practitioners/Technical Occ.	23,282	1.01	19.3%	11.2%	$32.863	91.0%
31-0000	Healthcare Support Occ.	10,769	0.90	24.9%	16.0%	$12.518	93.0%
33-0000	Protective Service Occ.	10,741	1.14	1.2%	3.5%	$17.617	85.1%
35-0000	Food Prep. and Serving Related Occ.	37,895	1.07	10.3%	17.8%	$10.165	101.2%
39-0000	Personal Care and Service Occ.	16,884	0.99	15.1%	13.3%	$9.832	90.5%
41-0000	Sales and Related Occ.	41,854	0.97	1.3%	6.5%	$13.717	85.3%
43-0000	Office and Admin. Support Occ	55,181	0.86	0.9%	6.0%	$15.547	94.7%
49-0000	Installation/Maint./Repair Occ.	17,949	1.11	3.7%	9.5%	$21.125	102.7%
51-0000	Production Occ.	21,255	0.84	1.0%	7.7%	$18.257	111.7%
53-0000	Transportation/Material Moving Occ.	23,111	0.84	4.4%	13.1%	$15.873	102.4%
	Total	**426,088**		**3.0%**	**8.9%**	**$19.74**	**94.8%**

Source: Economic Modeling Specialists Intl. (EMSI)

Specialization in Greater Williamsburg's Labor Shed

Employment growth among architectural and engineering occupations is one such example of specialization despite underperforming growth relative to the national average. From 2009 to 2016, architectural and engineering occupations expanded by just 2.1 percent regionally, well below the national average of 6.4 percent. However, architectural and engineering occupations remain significantly concentrated regionally. **In 2016, architectural and engineering employment was 78 percent more concentrated in the Greater Williamsburg region compared to the average community nation-wide.** Particular occupations possessed far higher degrees of specialization. For instance, aerospace engineer employment was three times more concentrated than the national average. Marine engineers and naval architects (almost 20 times more concentrated), mechanical engineers (55 percent more concentrated), and nuclear engineers (almost 18 times more concentrated), similarly represent areas of occupational specialization within the Greater Williamsburg region. Other areas of strength among Greater Williamsburg knowledge-based STEM (science, technology, engineering, and mathematics) occupations include astronomers and space scientists (three times more concentrated than the national average, astronomers and physicists (three and a half times more concentrated), and computer research scientists (two times more concentrated).

High concentrations of exceptionally specialized engineering talent are further supported by a cadre of specialized occupations that typically require only a two-year degree. For instance, employment among mechanical drafters, responsible for compiling detailed diagrams and schematics of machinery and mechanical devices, was more than five times more concentrated in the Greater Williamsburg area compared to the national average. As a whole, drafters, engineering technicians, and mapping technicians were more than twice as concentrated regionally as in the average community nationwide.

Certain production and distribution occupations are also in the process of concentrating within the Greater Williamsburg region. Growth among welding, soldering, and brazing workers (2.6 percent) displayed a positive outlook despite the occupational decline nationally (-7.5 percent). **Much of Greater Williamsburg's growth among welding, soldering, and brazing workers is likely interlinked with shipbuilding operations in the Virginia Beach region which serves as a boon to advanced metals manufacturers who require these skill sets for manufacturing operations.** Similarly, proximity to the Port of Virginia supports high concentrations of crane and tower operators (nearly three times more concentrated than the national average) logisticians (two and a half times more concentrated), and water transportation workers (almost eight times more concentrated).

As occupational growth and specialization trends demonstrate, Greater Williamsburg has a wealth of opportunities to target particular business sectors that leverage these skill sets and knowledge bases. Put simply, while much of the region's labor shed is located outside of the communities of Williamsburg, James City County, and York County; regional employers have access to a diverse occupational mix that would be attractive to firms operating specific sectors of the economy.

1. Advanced Materials and Components

Definition and Overview: The advanced materials and components target captures business activity related to the production, fabrication, and manipulation of metal, metal substrates, non-metallic products, and electrical components including circuits and semiconductors. Advanced materials and components manufacturers in Greater Williamsburg leverage locational advantages due to proximity to large metal, non-metallic product, and electrical component customers including the United States Armed Forces, Thomas Jefferson National Accelerator, NASA Langley Research Center, and Newport News Shipbuilding among others. Regional advanced materials and components production in Greater Williamsburg also includes the manufacture of sophisticated scientific instruments, equipment, and other sensor technologies.

Local Companies: Advanced materials and components companies operating in Greater Williamsburg include, but are certainly not limited to: Service Metal Fabricators, Greystone of Virginia, Travaini Pumps USA, Ryson International, and STAIB Instruments.

Near-Term Niches: The **Metals and Metal Products** niche captures companies engaged in fabricating and producing metals for customer bases in the defense, maritime, and industrial sectors among others. **Electric and Non-metallic Components** covers economic activity related to the semiconductors and circuits while the **Scientific Instruments and Technologies** niche captures regional business activity engaged in sophisticated equipment production including highly sensitive measuring devices and sensors capable of registering minute changes in conditions

Long-Term Niches: Although Greater Williamsburg is not home to sizable aerospace production activity, the region could leverage its high concentration of aerospace engineers to generate new private sector aerospace investment. Along with workforce advantages, the region could leverage increasing military investment in unmanned aerial vehicles and the research capabilities of NASA Langley Research Center to build a sustainable **Aerospace** niche in the future.

Character Considerations: Due to a limited inventory of industrial space, small acreage economic development product, and stakeholder concern about maintaining community character, small to medium sized manufacturing enterprises, or larger firms that have a small industrial footprint, are ideal advanced materials and components targets for the Greater Williamsburg Partnership to pursue.

National Trends: Like many manufacturing-focused sectors, advanced materials and components manufacturers are slowly recovering from turmoil caused by globalization and rising competition from China. Product optimization, concerns over the security of intellectual property, and rising labor costs are once again pushing production back onto the United States' shores. America's long-standing strength in product and process innovation is serving as a compelling business case, especially as advances in automation technologies, rapid prototyping, and industrial sensors lower development costs and reduces turn-around time between ideation and production. The Manufacturers Alliance for Productivity and Innovation found that a strong dollar, continued excess capacity, and low commodity prices would hurt metals producers in the near-term but projects positive growth for the metal fabrication, electrical

components, and navigational, measuring, electromedical, and control instruments producers over the next two years.

LOCATION CONSIDERATIONS AND ADVANTAGES

When it comes to attracting and recruiting advanced materials and components manufacturers, Greater Williamsburg must balance the community's overall aesthetic, character, and land availability with the business requirements of incoming prospects. **A strong desire to maintain Greater Williamsburg's quality of life and place was a common theme among public input participants. At times, the desire to maintain the region's rich quality of life was seen as working at odds with the business community. Many within the real estate development community noted that permit processing times may negatively impact regional capacity to recruit and expand new businesses**. As the Greater Williamsburg Partnership actively markets the region to outside prospects, enhancing the region's inventory of shovel-ready sites can quicken development timelines and reduce friction for relocating businesses. Other important locational considerations and advantages include the following:

- ✓ **Industrial Site Inventory:** Perhaps the biggest barrier to attracting and retaining advanced materials and components manufacturers regionally is a dearth of development product. Of the 63 properties available for development listed on the Greater Williamsburg Partnership website only 15 properties are currently zoned for industrial use. Of these industrial zoned properties, just one is larger than 200 acers. For many vertically integrated manufacturing operations, it is not uncommon for large industrial users to occupy 1,000 acres or more. However, a small site does not necessarily preclude certain vertically integrated production operations from occurring in the Greater Williamsburg area. For instance, Tesla Motors' main product facility in Fremont California sits on just 370 acres of land occupying a former automotive manufacturing facility. However, the limited industrial site inventory in Greater Williamsburg narrows the prospective pool of advance materials and components manufacturers. Economic development marketing efforts should tailor their scope to target specific manufacturing categories such as **Small to Medium Enterprises** or highly automated operations that require reduced physical footprints.

  Along with focusing on small to medium enterprises, the region should continue to enhance its industrial inventory. Securing the Pottery Property for economic development purposes could enlarge the number of acers available for industrial use regionally.

- ✓ **Water Capacity:** Water is an abundant or scarce resource depending on geographic location in the region. On the one hand, large portions of the region are serviced by Newport News who currently possesses excess capacity and can meet heavy water user demand. On the other, the Virginia Department of Environmental Quality has required James City County to halve the amount of water it draws from groundwater sources potentially limiting its capacity to serve communities in the far north western reaches of the region. Municipal governments are expanding water service northward. For instance, York County is extending a water main to the Lightfoot area, opening up new development opportunities related to the Pottery Property. However, water availability will

likely direct prospective advanced materials and components manufacturers towards certain portions of the Greater Williamsburg region until the ground water issue is resolved.

- ✓ **Proximity to Consumer Markets:** From a location standpoint, Greater Williamsburg's proximity to sizable metals, materials, and components purchasers in the broader Virginia Beach MSA is an attractive selling point to suppliers seeking to relocate operations, especially those servicing maritime or defense industries. In 2013, the most recent data available, businesses in the Virginia Beach region, excluding the communities of Williamsburg, James City County, and York County, purchased roughly $3.8 billion worth of advance materials and component products – nearly 90 percent or $3.4 billion of this purchasing activity occurred outside of the Virginia Beach region. Mapping advance materials and components supplier networks within the Virginia Beach region could yield potential supplier prospects who may desire a more proximate location to their customer base.
- ✓ **Proximity to the Port of Virginia:** The inauguration of the $5 billion Panama Canal expansion opens the way for new economic activity to occur along the United States eastern ports. The Port of Virginia, however, will be in intense competition for new economic activity generated by the expansion. On July 11th, 2016, the Port of Virginia celebrated the first arrival of the MOL Benefactor, a neo-panamax class vessel and one of the first to travel through the Panama Canal. The Panama Canal expansion brings new avenues to China and offers potential economic opportunities for advance materials and components manufacturers, particularly those that import heavy raw materials, export cumbersome finished goods, or **Assembly and Distribution** operations that provide final assembly to goods shipped through the port.

REGIONAL EMPLOYMENT TRENDS

Greater Williamsburg's employment trends indicate two key niche opportunities within the advanced materials and components space: **metal and metal products** and **electrical and non-metallic components**. Metals and metal products captures activity related to the transformation or fabrication of raw, unfinished, or scrap metal into finished goods. The electrical and non-metallic components niche encapsulates highly specialized glass, instrumentation, circuitry, and semiconductor component activity within the region.

- ✓ **Regional advanced materials and components employment was relatively unaffected by the Great Recession.** From 2007 to 2009, advanced materials and components employment declined by just 3.2 percent regionally. In comparison, the national advanced materials and components sector (-14.1 percent) showed far more distress during the recession. Government spending, particularly as it relates to shipbuilding and scientific instruments and components, likely sheltered the region's advance materials and components manufacturers from bearing the full brunt of the recession.
- ✓ **Advanced materials and components manufacturers in Greater Williamsburg displayed robust post-recession growth.** From 2009 to 2016, advanced materials and components employers added 440 jobs to their payrolls (51.6 percent). Nationally, the advanced materials and components sector grew by just 2.9 percent during the seven year recovery. Again, rapid growth

among the region's advance materials and components sector denotes a regional competitive advantage relative to the average community nationwide.

- ✓ **Advanced materials and components manufacturing activity is specialized in the Greater Williamsburg region.** As a whole, advanced materials and components employment was nearly twice as concentrated regionally as the average community nationwide. Certain advanced materials and components subsectors display further signs of specialization including foundries (three times more concentrated than the national average); coating, engraving, heat treating, and allied activities (two times more concentrated); and other electrical equipment and component manufacturing (two and a half times more concentrated).

- ✓ **Advanced materials and components manufacturers are a source of high wage employment opportunities for Greater Williamsburg residents.** In 2016, the average advanced materials and components employee earned $70,885 annually, roughly double above the regional average annual wage ($35,448). Compared to the national average, regional labor is cost-competitive. In 2016, advanced materials and components workers earned 9.7 percent below the national average. Sub-national average wages are attractive to prospective businesses, regional employers could experience difficulty attracting and retaining advanced materials and components talent even when factoring favorable cost of living differentials.

Advanced Materials and Components Employment Trends, 2006-2016

NAICS	Description	Location Quotient	Jobs (2016)	Net Change in Jobs (06-16)	% Change in Jobs (06-16)	Net Change in Jobs (16-26)	% Change in Jobs (16-26)	US % Change in Jobs (06-16)	Average Wages (2016)	% of U.S.
Metals and Metal Products										
3315	Foundries	3.29	180	180	NA	100	55.7%	-26.1%	$86,361	160.9%
3323	Architectural and Structural Metals MFG.	0.30	52	6	13.3%	12	23.8%	-9.9%	$62,296	123.2%
3324	Boiler/Tank/Shipping Container MFG.	6.01	265	-15	-5.2%	5	1.9%	2.4%	$80,150	132.3%
3328	Coating/Engrav./Heat Treat./Allied Actvt.	2.02	128	80	169.3%	51	40.2%	-7.9%	$32,467	69.7%
Electrical and Non-Metallic Components										
3271	Clay Product and Refractory MFG.	0.54	11	NA	NA	-6	-45.5%	-29.6%	$12,130	24.7%
3272	Glass and Glass Product MFG.	6.80	275	22	8.9%	18	6.7%	-17.7%	$65,213	121.3%
3339	Other General Purpose Machinery MFG.	0.46	57	24	71.1%	41	71.7%	-3.9%	$99,189	149.7%
3341	Computer/Peripheral Equipment MFG.	0.74	54	-19	-25.9%	-7	-12.8%	-18.8%	$111,649	66.0%
3344	Semicndctr./Other Electron. Comp. MFG.	0.47	79	-4	-4.3%	-41	-52.0%	-19.8%	$98,072	100.0%
3345	Nav./Msr./Electromed./Ctrl. Instr. MFG.	0.23	42	NA	NA	-18	-42.5%	-9.1%	$73,780	77.4%
3359	Other Electrical Equipment/Comp. MFG.	2.46	149	NA	NA	10	6.8%	-4.3%	$45,833	72.6%
	Total, Target Sector	**1.93**	**1,293**	**460**	**55.2%**	**166**	**12.8%**	**-12.6%**	**$70,885**	**90.3%**
	Total, All Industries		**72,452**	**1,744**	**2.5%**	**10,886**	**15.0%**	**4.8%**	**$35,448**	**71.1%**

Source: Economic Modeling Specialists Intl. (EMSI)

OCCUPATIONAL TRENDS: GREATER WILLIAMSBURG'S LABOR SHED

Beyond the Greater Williamsburg Partnership's administrative boarders is a highly skilled workforce of 426,088 located in zip codes extending northwest to the city of Richmond and southeast to the city of Norfolk. The occupational mix of this workforce provides further niche opportunities within the target

sector. The sheer volume and concentration of STEM talent in the region may be attractive to **scientific instruments and technologies** companies as well as those operating in the **aerospace** sector.

The following are key occupational trends within the target sector, for a full list of the occupations that comprise the advanced materials and components sector please see appendix A:

- ✓ **Engineering and scientific talent is highly concentrated in the Greater Williamsburg labor shed.** Concentrations among aerospace engineers (LQ = 3.12), marine engineers and naval architects (LQ = 19.96), electrical and electronics engineers (LQ 1.75) astronomers and physicists (LQ = 3.51), and atmospheric and space scientists (LQ = 3.41) showed a high degree of specialization and is sufficiently concentrated to appeal to prospective advanced materials and components manufacturers, particularly those that rely on a knowledge-based workforce.
- ✓ **Robust concentrations of engineering technicians and drafters further support the advanced materials and components workforce.** Employment among drafters (LQ = 2.14) and engineering technicians, excluding drafters (LQ = 2.42) was twice as concentrated as the average community nationwide. The higher than average concentrations of technical talent further improve the region's attractiveness to advance materials and components manufacturers.
- ✓ **While the region does possess high concentrations of engineering and technical talent, the presence of preexisting large employers could leave little excess capacity for new advanced materials and components entrants.** For instance, many of the aerospace engineers in the region are likely employed at the NASA Langley Research Center, Thomas Jefferson National Accelerator Facility, or serve in the United States Armed Services. Defense contractors and engineering firms in the professional and technical services sector could also utilize these particular knowledge skill sets. This is to say that STEM skill sets are highly sought after and may not leave room for new businesses wishing to tap into the region's technical workforce.
- ✓ **Despite the significant toll of the Great Recession and subsequently reduced federal spending on basic scientific research and defense spending, the advanced materials and components workforce is recovering.** From 2009 to 2016, occupational employment grew by nearly 700 jobs, a gain of 2.5 percent. Fueling post-recession growth is an equal mix of knowledge-based and production-oriented employment. Strong growth among first-line supervisors of production and operating workers (5.7 percent); electrical, electronics, and electromechanical assemblers (8.2 percent); machinists (10.4 percent); and welding, soldering, and brazing workers (7.6 percent) signals an expanding pool of available labor for manufacturers and producers within the target sector.

TRAINING PROGRAMS

Advanced materials and components manufacturers workforce requirements are diverse, covering engineering positions responsible for product design and production efficiency as well as front-line assembly workers on the factory floor. Although William & Mary and Thomas Nelson Community College don't have specific advanced materials and components degree programs, the institutions do offer training

programs that provide translatable skill sets and knowledge bases relevant to employers in the target sector.

- ✓ Thomas Nelson Community College offers numerous advanced manufacturing programs including those in the following fields.
  - ❖ **Advanced Integrated Manufacturing Technology** – Offered at the associate's degree level, the program blends together knowledge clusters in the following fields: mechanical engineering, engineering technology, computer aided drafting, and robotics. The program further stresses critical thinking and collaboration.
  - ❖ **Advanced Mechatronics Technology** – Sponsored by Siemens, this accelerated program fills a critical demand response need in the region allowing employers to quickly train their production and technician employees.
  - ❖ **Electronics Technology** – The associate's degree program affords students the opportunity to prepare themselves for careers in electrical system technology, fiber optic installation, and industrial production.
  - ❖ **Computer Aided Drafting and Design** – The associate's degree program is focused on developing 3-D printing skill sets with industry leading computer design programs.
  - ❖ **Engineering** – The program prepares students for pursuit of an engineering bachelor's degree at a four-year higher education institution.
  - ❖ **Mechanical Engineering Technology** – Thomas Nelson's associate's program in mechanical engineering technology is tailored to meet the interests of the student. Students can specialize in various mechanical engineering technologies including marine engineering and mechanical design.
  - ❖ **Welding** – Through its workforce development division, Thomas Nelson Community College offers five or nine week welding training programs. Thomas Nelson Community College is an American Welding Society (AWS) accredited facility.
- ✓ Although William & Mary is a liberal arts research university, the College does house academic programs that may lead to careers in the advanced materials and components sector:
  - ❖ **Chemistry** – The College of William & Mary offers students a hands-on learning experience that stresses the importance of learning within a laboratory setting. The College is consistently recognized for its ability to produce quality chemistry graduates by the American Chemical Society.
  - ❖ **Physics** – Partnerships with the Thomas Jefferson National Accelerator and NASA Langley Research Center distinguish the learning environment for William & Mary physics students relative to other colleges and universities. The College offers degree programs at the bachelor's, master's, and doctoral degree levels.
  - ❖ **Mathematics** – Mathematics graduates are capable of translating and applying mathematical principles to solve problems in a variety of settings. Production efficiency and logistical problems are deeply rooted in mathematics.

- ✓ The **Peninsula Council for Workforce Development** is also a training resource available to new and existing employers in the Greater Williamsburg region. Through its employer initiatives, new and prospective businesses can obtain rapid response, on-the-job training, and applicant pre-screening services along with an advanced manufacturing flexible-entry-flexible-exit system offered in partnership with Thomas Nelson Community College.

MARKETING IMPLICATIONS

From an economic development marketing perspective, targeting advanced materials and components companies accomplishes two important goals for the Greater Williamsburg region: 1) The target aligns with the economic development marketing efforts of the Virginia Economic Development Partnership which currently targets plastics and advanced materials and 2) distinguishes Greater Williamsburg's advanced manufacturing niche to national and international audiences.

- ✓ **Greater Williamsburg makes a compelling case for advanced materials and components manufacturers who require highly skilled engineering and technical talent.** Further the immense presence of the United States Armed Forces and federal research and development institutions are scientific and engineering workforce magnets.
- ✓ **Community "fit" is equally important to residents and prospective advanced materials and components manufacturers.** Given the small acreage of the region's economic development product, Greater Williamsburg should focus its advanced materials and components marketing efforts on small to medium sized advanced materials and components manufacturers.
- ✓ From a product development standpoint, Greater Williamsburg's current industrial economic development product is a limiting factor for target sector business recruitment. Securing and assembling new industrial land as well as preserving existing industrial land from encroachment will be paramount to accommodating new advanced materials and components growth.
- ✓ **Virginia tax structure may impact Greater Williamsburg's capacity to attract certain types of manufacturing operations.** A recent report by KPMG and the Tax Foundation found that the commonwealth's tax structure favored labor intensive manufacturing operations compared to capital intensive manufacturing operations. For mature manufacturing firms, labor-intensive manufacturing operations enjoyed a 4.3 percent effective tax rate (2nd out of 50 states) while capital intensive manufacturing operations experienced a 9.3 percent effective tax rate (20th out of 50 States) according to the report.
- ✓ **Expanding infrastructure capacity within the region is paramount to recruit, retain, and expand advanced materials and components manufacturers.** Addressing the region's water capacity challenges as well as increasing capacity along the I-64 corridor can further enhance the community's viability for advanced materials and components operations.
- ✓ Economic development marketing efforts should relay the purchasing power and activity of nearby advanced materials and components consumers including the United States Armed Forces and Newport News Shipbuilding. Strengthening supplier relationships may also yield expansion opportunities of firms already located in the Greater Williamsburg region.

2. Food and Beverage

Definition and Overview: With industry leaders and rising new entrants, Greater Williamsburg's food and beverage sector captures manufacturing activity related to the production of alcoholic and non-alcoholic beverages in the Greater Williamsburg region along with the transportation and distribution of food, food products, and beverages. The target sector also includes food and beverage suppliers that provide product packaging materials and services.

Local Companies: Food and beverage companies in Greater Williamsburg comprise a mix of new, upstart companies seeking to build their brand as well as established industry veterans: Anheuser-Busch InBev, Printpack, La Tienda, Copper Fox Distillery, and Williamsburg Winery.

Near-Term Niches: The focal point of Greater Williamsburg's **Beverages** niche is the Anheuser-Busch InBev brewery although the niche is inclusive of both alcoholic and non-alcoholic beverage producers. As a result of brewery operations in the region, a host of supporting **Bottling and Food Packaging** companies such as Ball Metal and Owens-Illinois arose to provide packaging for beverages and other food products. Finally, the region's proximity to the Port of Virginia as well as its central location along the eastern coast is advantageous to **Warehousing and Distribution** companies who transport perishable goods along the value chain.

Long-Term Niches: Food and beverage companies with limited product runs have a wider range potential sites and locations relative to their industrial scale brethren. Demolition grant programs operated throughout the region, for instance, are opening up blighted commercial properties for food and beverage operations. Much of this activity is the result of entrepreneurship and will require time to mature. However, as these companies grow and expand, Greater Williamsburg could become an appealing destination for producers of **Distilled Spirits** or **Specialty Food Products** which includes snack food, candy, and animal food among other high wage opportunities

Character Considerations: In terms of "community fit," Greater Williamsburg's food and beverage sector, particularly as it relates to small batch producers, aligns with the community's desire to evolve its tourism product. As the community leverages incentive programs to redevelop distressed commercial properties, a variety of food and beverage companies have arisen that appeal to younger visitors seeking compelling experiences. Industrial scale producers, on the other hand, encounter many of the locational challenges of the advanced materials and components target: land and water availability could inhibit growth within the sector if not properly addressed.

National Trends: Shifting consumer tastes and increasing concern over the health impact of processed foods continues to shape the food and beverage sector nationally. The nation's beverage sector, especially as it relates to alcoholic beverages, is under a process of disruption, driven by a rising craft beer and spirits movement. To remain competitive in a diffuse beer and spirits marketplace, established brands are continually seeking to expand product selection through acquisitions. At the same time, food and beverage companies are also looking toward product innovation to drive new growth. A 2014 survey of food, drink, and consumer goods companies conducted by KPMG found that 52 percent of respondents believed that

product innovation would be the most significant driver for their company's revenue growth over the next three years.

LOCATION CONSIDERATIONS AND ADVANTAGES

On an industrial scale, food and beverage companies resemble advanced manufacturing operations requiring stable power, abundant water capacity, and an integrated transportation network to obtain raw materials and transport finished product to market. Small-scale production operations on the other hand typically experience the same challenges that many small businesses encounter. Other locational considerations and advantages include the following:

- ✓ **Transportation Networks:** Food and beverage companies are in a race against time. Whether it is obtaining perishable raw materials from agricultural producers or shipping finished product to market, increased travel time can reduce the market reach of food and beverage producers. Consequently, interconnected transportation networks are a critical location factor for many food and beverage companies. In terms of locational strengths, proximity to the Port of Virginia and adequate rail service provides prospective food and beverage companies with a competitive advantage. **However, public input participants noted the growing traffic along I-64 is a key concern for food and beverage producers. Survey input reinforced this concern. Approximately 53.2 percent of business stakeholders responding to the survey rated the Greater Williamsburg's interstate capacity as a "disadvantage" or "major disadvantage." Forty-nine percent of these respondents also rated the region's roadway connectivity and capacity as a "disadvantage" or "major disadvantage."** In 2011, the Virginia Department of Transportation (VDOT) rated level of service (LOS) along significant portions of the I-64 corridor extending from the city of Richmond to the city of Hampton as D, E, or F – the lowest ratings provided by VDOT which grades level of service along an A through F continuum. Current road improvements along I-64 may positively impact traffic congestion – improving the region's vital economic link between to I-85, I-95, and the Port of Virginia.
- ✓ **Trucking Capacity: Along with physical road infrastructure, food and beverage stakeholders expressed concern about declining availability of heavy and tractor-trailer truck drivers in the region.** These concerns are not unique to Greater Williamsburg. In 2015, the American Trucking Associations' Truck Driver Shortage Analysis found that the trucking industry would need to hire a total of 890,000 new drivers, or an average of 89,000 per year, to replace retiring truck drivers nationally. If current trends hold, the ATA found that the number of truck drivers could fall 175,000 short of national demand by 2024. **To address declining trucking capacity regionally, stakeholders acknowledge the need to find short-term solutions including promoting backhaul opportunities among businesses throughout the Greater Williamsburg and broader Virginia Beach region.**
- ✓ **Water Capacity:** As discussed in the previous section, water capacity in Greater Williamsburg is either a concern or a non-issue depending on geographic location in the region. Potential for food

and beverage operations in the northern portion of James City County will be severely limited until alternative water sources are identified and developed.

- ✓ **Food and Beverage Economic Development Product:** For industrial scale food, beverage and specialty food operations, the region's available economic development product is limited. For small batch producers, the region affords more options due to these producers spatial flexibility. Small batch producers have the potential to position operations outside of industrial zoned areas as well as catalyze redevelopment of blighted commercial property such as the redevelopment of Lord Paget Hotel by Copper Fox Distillery and the 401 Second Street body shop by the Virginia Beer Company.
- ✓ **Permitting Review Process: When asked to rate various aspects of Greater Williamsburg's business climate, stakeholders rated the region's "ease and speed of permit review process" as one of its top competitive disadvantages. Approximately 49.1 percent of respondents assessed Greater Williamsburg's collective permitting review processes as a disadvantage or major disadvantage.** In many communities across the country, business leaders, real estate developers, and entrepreneurs typically find permitting times too lengthy or cost prohibitive to promote new business growth. This issue is not specific to Greater Williamsburg. Even so, the Greater Williamsburg Partnership should work towards streamlining review processes, where appropriate, for entrepreneurs operating in business sectors that align with the region's targeted sectors.

EMPLOYMENT TRENDS

Food and beverage business sector data indicate three niche sectors in which Greater Williamsburg is particularly competitive: **Beverages**; **Bottling and Food Packaging**; and **Warehousing and Distribution**. Anheuser-Busch InBev operations in the region are unquestionably a catalyzing force for bottling and food packaging capacity. Proximity to the brewery is an attractive selling point for bottlers and canners such as Owens-Illinois and Ball Metal Manufacturing.

- ✓ **Brewing activity in Greater Williamsburg is highly localized.** In 2016, breweries in the Greater Williamsburg region employed nearly 16 times the number of workers expected national average for an economy of Greater Williamsburg's size. The continued presence of Anheuser-Busch InBev has further attracted bottling and canning suppliers who gain locational advantages by being located proximate to an engrained customer base. As a result, employment in the glass and glass product manufacturing (nearly seven times as concentrated as the average community nationwide) and metal can, box, and other metal container manufacturing (seventeen times as concentrated) is also highly localized in the Greater Williamsburg region.
- ✓ **Greater Williamsburg's brewery sector generates significant purchasing activity for glass bottles and metal cans much of which is locally produced.** In 2013, EMSI estimates that the Greater Williamsburg's brewery sector alone purchased $33 million worth of metal can manufacturing products and $17 million worth of glass products. In terms of the brewery supply chain, metal can manufacturing and glass product manufacturing represented sector's second and fourth largest supply chain linkages respectively.

- ✓ **Impacted by the Great Recession, food and beverage employment is still in recovery.** Over the past decade, food and beverage employment declined by -391 jobs, a loss of 15.4 percent. Along with the Great Recession, broader industry trends may also have negatively impacted employment within the food and beverage space. A variety of factors including the expansion of automation technologies on the factory floor and changing human resource strategies such as increased use of contract labor may also have contributed to employment declines.

Food and Beverage Employment Trends, 2006-2016

NAICS	Description	Location Quotient	Jobs (2016)	Net Change in Jobs (06-16)	% Change in Jobs (06-16)	Net Change in Jobs (16-26)	% Change in Jobs (16-26)	US % Change in Jobs (06-16)	Average Wages (2016)	% of U.S.
Beverages										
31212	Breweries	16.0	401	-37	-8.5%	-140	-35.0%	107.5%	$61,795	111.5%
31213	Wineries	1.5	43	-48	-52.8%	-33	-75.7%	70.8%	$28,383	67.4%
42449	Other Grocery/Related Products Whls.	1.1	119	-13	-9.6%	-1	-0.6%	0.9%	$39,968	70.1%
Bottling and Food Packaging										
32721	Glass and Glass Product Manufacturing	6.8	275	61	28.4%	18	6.7%	-17.7%	$65,213	121.3%
32619	Other Plastics Product Manufacturing	0.4	56	-54	-48.8%	-45	-80.1%	-18.5%	$58,670	126.7%
33243	Metal Can/Box/Other Metal Cntain. Mfg.	17.0	265	32	13.6%	5	1.9%	-23.9%	$80,150	132.8%
Warehousing and Distribution										
49311	General Warehousing and Storage	2.3	782	291	59.2%	119	15.3%	40.5%	$40,146	96.0%
49312	Refrigerated Warehousing and Storage	0.5	14	14	NA	5	34.2%	25.9%	$44,446	96.0%
48411	General Freight Trucking, Local	0.1	16	-22	-57.5%	NA	NA	-0.1%	$35,585	86.1%
48412	General Freight Trucking, Long-Distance	0.1	42	-71	-62.8%	-18	-42.9%	-2.7%	$36,849	78.2%
48422	Specialized Freight Trucking, Local	0.4	41	10	34.0%	15	36.9%	5.5%	$35,970	76.0%
48423	Special. Freight Trucking, Long-Distance	1.5	96	50	108.6%	34	35.2%	14.3%	$42,094	78.8%
	Total, Sector	**8.1**	**2,151**	**-391**	**-15.4%**	**-57**	**-2.6%**	**6.5%**	**$52,499**	**112.7%**
	Total, All Industries		**72,452**	**1,744**	**2.5%**	**10,886**	**15.0%**	**4.8%**	**$35,448**	**71.1%**

Source: Economic Modeling Specialists Intl. (EMSI)
NA = Not Available

- ✓ **The loss of employment regionally is particularly concerning given the rise of food and beverage employment across the United States.** From 2006 to 2016, the national food and beverage sector grew by 6.5 percent, adding nearly 192,000 food and beverage jobs. Employment growth among the nation's food and beverage sector was led by growth in breweries (107.5 percent), wineries (70.8 percent), and food and beverage warehousing and logistics operations including refrigerated storage (25.9 percent).

- ✓ **Preserving and sustaining food and beverage operations in Greater Williamsburg will provide the region's residents with high-wage employment opportunities.** In 2016, the average food and beverage employee earned roughly $52,499 annually. In comparison, average wages in the national food and beverage sector stood a just $46,569 – nearly $5,931 below the regional average. Although food and beverage employers may not view the region as cost competitive from a labor standpoint, higher average annual wages earned by regional food and beverage workers could be alluring to prospective new talent in the target sector.

OCCUPATIONAL TRENDS: GREATER WILLIAMSBURG'S LABOR SHED

Behind the food and beverage operations in the region is a broader workforce with marketable skill sets that are appealing to food and beverage employers. Along with a knowledge-based workforce, the region houses strong capacity for warehousing and distribution operations, particularly as it relates to maritime shipping.

The following are key occupational trends within the target sector, for a full list of the occupations that comprise the food and beverage sector please see appendix A:

- ✓ **Prospective and existing food and beverage companies have access to a food and beverage labor shed of 35,803 workers.** Captured within this labor shed are numerous occupations that support production operations as well as distribution activities particularly related to port operations.
- ✓ **Compared to the national target sector, Greater Williamsburg's food and beverage sector is more oriented toward professional, supervisory, and skilled trades.** In 2016, sales representatives (2.7 percent of the total regional food and beverage sector), first-line supervisors of production and operating workers (2.2 percent), and industrial machinery mechanics represented a far larger portion of the target sector compared to their national averages (1.6 percent, 0.8 percent, and 0.4 percent respectively). This occupational mix likely supports elevated food and beverage wages regionally relative to the national target sector.
- ✓ **Food packaging operations, particularly producing plastic packaging products, could be impacted by a declining pool of metal and plastic workers in the future.** From 2006 to 2016, employment among metal and plastic workers declined by 377 jobs or 22.0 percent. Further weakening of the metal and plastic workforce could make Greater Williamsburg an unattractive relocation or expansion destination for food and beverage packaging operations in the future.
- ✓ **Greater Williamsburg's regional labor shed may be attractive to food and beverage companies who rely on importing or exporting raw materials or finished goods internationally.** Employment among sailors and marine oilers (eight times more concentrated than the national average), ship and boat captains and operators (five times more concentrated) and crane and tower operators (almost three times more concentrated) were highly concentrated in the Greater Williamsburg labor shed. Occupational concentrations among rail transportation workers were proximate to the national average.
- ✓ **An underdeveloped pool of driver/sales workers and truck drivers (which include heavy and tractor-trailer truck drivers) in the region's labor shed corroborates stakeholder trucking capacity concerns.** Compared to the national economy, employment among the Greater Williamsburg driver/sales workers and truck drivers workforce is 28 percent below expected employment levels. Employment trends further suggest that limited truck driver availability will be an ongoing issue for the food and beverage sector. From 2006 to 2016, regional occupational employment among driver/sales workers and truck drivers declined by -5.7 percent. Occupational employment increased 2.0 percent nationally during this time period.

TRAINING PROGRAMS

Due to close connection to consumer markets, food and beverage employers rely on a host of training programs that build sales capacities along with production and distribution skill sets. Although Thomas Nelson Community College and the College of William & Mary do not currently offer food and beverage specific programs, they do offer degree programs that appeal to prospective and existing food and beverage companies:

- ✓ **Along with the advanced manufacturing degree programs discussed in the advanced materials and components target profile**, other attractive degree programs offered by Thomas Nelson Community College include:
  - ❖ **Commercial Driver License Training –** Offered through the TNCC workforce development division, commercial driver license training provides hands-on tractor-trailer driver training from experts within the field. Upon completion of the program, students receive lifetime nationwide job placement assistance.
  - ❖ **Air Conditioning and Refrigeration** – Thomas Nelson Community College's Air Conditioning and Refrigeration certificate is a 10 course program that covers heating systems, planning and estimating, and mechanical codes for air conditioning and refrigeration systems. The certificate program meets the requirements for Journeyman licensing.
  - ❖ **Geographical Information Systems Technician –** Warehousing and distribution operations increasingly rely on geographic information systems to identify efficient routes to transport goods, track deliveries, and manage transportation assets. Geographic information systems graduates could fit into roles at food and beverage companies with extensive and complex distribution channels.
- ✓ In terms of four-year degree programs, the College of William & Mary offers a limited number of degree programs that could lead to careers in the food and beverage sector outside of chemistry. Vertically integrated food and beverage operators, however, may be interested in the following business degree programs offered through the Mason School of Business:
  - ❖ **Business Administration** – Through the business administration program, William & Mary students can pursue a minor in supply chain analytics. These graduates could fill positions at food and beverage distributors or straight-to-consumer manufacturing operations. The Mason College of Business also offers MBA and Executive MBA programs.
  - ❖ **Business Analytics** – The Master of Business Analytics is a new course offering from the Mason School of Business. The degree program is a full-time, accelerated program that can be completed in two semesters. The program of study focuses on preparing students for careers in big data – a field that food and beverage companies are increasingly leveraging to stay ahead of changing consumer tastes and predict future behaviors.

- ✓ As part of its demand response model, the Peninsula Council for Workforce Development is capable of developing customized training programs in partnership with employers. This service could be used by food and beverage companies to meet critical skill gaps and address workforce shortages.

MARKETING IMPLICATIONS

The Greater Williamsburg food and beverage target aligns with economic development programs in the commonwealth of Virginia. The Virginia Economic Development Partnership currently targets "food processing" while the commonwealth has developed incentive programs aimed at tourism promotion such as the Virginia Tourism Growth Fund that can be leveraged by small batch food and beverage companies.

- ✓ **Greater Williamsburg should guide food and beverage companies to specific locations in the region until water availability issues are resolved.** Since food and beverage companies require abundant water, economic development marketing should guide food and beverage producers to southern portions of the Greater Williamsburg region until water issues are resolved. Northern portions of the region are more suitable for food and beverage warehousing and distribution operations.
- ✓ **The presence of large food and beverage operations in the region signals that Greater Williamsburg can accommodate food and beverage production operations**.
  - ❖ Given the small size of the region's food and beverage sector, site selectors and business executives in charge of site selection could be deterred from relocating or expanding operations to the Greater Williamsburg region. Communicating labor availability within the Greater Williamsburg labor shed may ease these concerns.
  - ❖ Communicating rapid response training capacity at the Peninsula Council for Workforce Development and Thomas Nelson Community College can further alleviate workforce availability concerns.
- ✓ **The absence of a concentrated heavy and tractor-trailer workforce is a concern for incoming food and beverage companies who transport perishable food product.** Developing and communicating a plan of action to address the shortage will be critical to selling the region's market access to northeastern and southeastern markets. Such efforts may entail recruiting truck transportation and distribution companies to the region.
- ✓ From a transportation infrastructure standpoint, the Greater Williamsburg region is proximate to significant water and rail operations as well as the Port of Virginia. Capacity is also increasing at the Port of Virginia with the Craney Island expansion – a state-of-the-art automated container terminal with capacity to handle 50 percent of total container volume by rail.
- ✓ **Certain food and beverage infrastructure could improve the regional business climate for small batch and specialty food manufacturers.** Creating commercial kitchens or co-packing capacity in the region for instance can better allow small food and beverage businesses to scale business operations.

- ❖ Along with these opportunities, Greater Williamsburg will likely need to expand its capacity for cold storage. Current refrigerated warehousing and storage capability is likely insufficient to meet the needs of prospective food and beverage companies who require refrigerated facilities to store and distribute perishable goods.

✓ Identifying small batch expansion opportunities in the region, the commonwealth, or northeastern and southeastern markets could drive future growth within the target sector.

✓ **Given the relatively limited stock of available industrial properties and land suitable for industrial development, Greater Williamsburg should focus on food and beverage operations that offer high earnings potential.** Such operations should exceed the regional average ($35,448) and ideally offer comparable wages to those offered by existing food and beverage employers ($52,499). Nationally, high wage food and beverage manufacturing sectors include the following:

- ❖ Animal Food Manufacturing ($59,780 national average annual wage 2016)
- ❖ Flour Milling and Malt Manufacturing ($62,515)
- ❖ Starch and Vegetable Fats and Oils Manufacturing ($77,384)
- ❖ Non-chocolate Confectionery Manufacturing ($48,273)
- ❖ Fruit and Vegetable Canning, Pickling, and Drying ($49,495)
- ❖ Dairy Product (except Frozen) Manufacturing ($57,904)3
- ❖ Coffee and Tea Manufacturing ($52,282)
- ❖ Flavoring Syrup and Concentrate Manufacturing ($145,910)
- ❖ Seasoning and Dressing Manufacturing ($60,067)
- ❖ Soft Drink and Ice Manufacturing ($51,747)
- ❖ Breweries ($55,442)
- ❖ Distilleries ($73,933)

3. Professional and Technical Services

Definition and Overview: Professional and technical services companies in Greater Williamsburg deliver a wide range of professional and technical services including: management, technical, engineering, and design consulting; corporate operations management; research and development; and information technology services. Professional and technical services firms typically utilize skilled, knowledge-based workers who are exceedingly mobile. As a result, Greater Williamsburg can leverage its strengths as a vibrant community to attract relocating or expanding professional and technical services operations.

Local Companies: Professional and technical services companies operating in the Greater Williamsburg region include, but are certainly not limited to the following: Enterprise Holdings, AidData, Index AR Solutions, and INCOGEN.

Near-Term Niches: Given regional higher institution capacity and the presence of corporate operations already in the region, Greater Williamsburg is an attractive destination for **Management and Operations Services** companies responsible for providing management consulting services as well as other operations charged with overseeing corporate strategic execution. Over the next five-years, Greater Williamsburg is also an alluring location for **Engineering and Technical Consulting** firms that provide a wide range of services such as designing computer information systems, solving engineering challenges, and discovering new business opportunities through research and development. Finally, **Creative Design** covers a host of activity typically associated with the "creative economy" including architectural services, advertising and graphic design, and landscape architecture.

Long-Term Niches: Although there is an absence of information technology professionals within the regional labor shed, capacity for training computer, statistics, and data science professionals is expanding. So long as the region can retain these graduates, the Greater Williamsburg region could become competitive for **Data Science and Analytics** operations engaged in processing, analyzing, and visualizing extremely large data sets.

Character Considerations: Greater Williamsburg affords its residents with a high quality of life, memorable sense of place, and quality school systems, all elements which typically influence corporate regional office and headquarter relocations. While Greater Williamsburg is not an attractive destination for large headquarters, especially considering insufficient airport capacity, the community is appealing to less sizable corporate operations especially those looking for built-to-suit options.

National Trends: By far, the most important input into a professional and technical services company is its people. Workforce diversity and availability will continue to drive business decision making within the professional and technical services sector for the foreseeable future. In a recent survey of corporate executives, PricewaterhouseCoopers found that 78percent of US CEOs felt that a skilled, educated and adaptable workforce should be a priority for business. Shifting composition of consumer markets also demands an increasingly diverse workforce. In the same survey, PricewaterhouseCoopers found that 73 percent of CEOs in the United States felt that demographic shifts are a top global trend that will transform consumer expectations and desire for new product offerings. Concerns over talent sustainability and

diversity now, more than ever, stresses the importance of a community's built environment and the quality of life it can offer to employees within the professional and technical services sector.

LOCATION CONSIDERATIONS AND ADVANTAGES

The viability of the professional and technical services sector in any community is interlinked with its capacity to attract and retain highly skilled talent into their community. This is to say that a community's sense of place and quality of life is integral to the health and sustainability of employment within the target sector. Given the region's quality of life particularly for families, cultural and entertainment offerings, and highly regarded school districts, Greater Williamsburg is a competitive destination for **Regional Offices and Headquarters**. Moreover, mission-driven **Social Enterprises** operating in the region could be leveraged to grow the regional pool of young professional talent. **Throughout public input, focus group participants frequently highlighted many positive aspects of Greater Williamsburg's quality of life including quality school systems, numerous recreational trails, and new businesses such as the Virginia Beer Company and AleWerks which contribute to the region's attractiveness as a place to live.** Other locational advantages and considerations for Greater Williamsburg include the following:

- ✓ **Young Professionals: During focus group input, young professionals in Greater Williamsburg noted that the community is not appealing to certain segments of the millennial demographic. For instance, Greater Williamsburg was seen as an alluring destination for young professionals who have just started a family while single young professionals were thought to be more attracted to the city of Richmond. Survey respondents tended to support this viewpoint. When asked whether "Greater Williamsburg is an attractive and desirable place to live for young professionals" approximately 43.1 percent of survey respondents either disagreed or strongly disagreed with the statement. In contrast, just four percent of survey respondents cited similar levels of disagreement to the statement "Greater Williamsburg is an attractive and desirable place to live for families with children.**

  Stakeholders also felt that Greater Williamsburg must play to its strengths when it comes to young professional attraction. Along with young professionals starting families, those that enjoy the outdoors and water recreational activities were also seen as young professional population segments that would be attracted to Greater Williamsburg. Although many felt young professionals who don't fit these criteria would not want to live in Greater Williamsburg, it does not preclude regional businesses from pulling talent from other desirable young professional destinations such as the cities of Richmond and Norfolk.

  Access to a young professional workforce is particularly pertinent due to the challenge of attracting qualified workers to the area. **According to the online survey, six out of every ten business stakeholder respondents identified that they had experienced difficulty finding qualified workers for their business over the last five years.** Many respondents cited limited dining and entertainment options as well as prohibitively costly housing as a key challenge to their ability to attract talent to Greater Williamsburg.

- ✓ **Higher Education Assets:** The College of William & Mary is a critical asset in sustaining the regional talent pipeline. The College prepares numerous students for careers in the professional and technical services sector. In 2015, nearly 2,500 students completed their programs of study at the College of William & Mary according to the National Center for Education Statistics. Of the approximately 2,500 students who graduated approximately 56 percent were female and 44 percent were male. Many of these students also graduated with desirable professional and technical services skill sets. For instance, nearly 500 students graduated with a business management, marketing, or related degree while 454 graduated with a STEM-oriented degree. **Although the College of William & Mary produces capable graduates, stakeholders throughout public input noted that many of these graduates don't stay in Greater Williamsburg upon graduation. The College and private businesses are seeking solutions; however, it remains difficult to link college graduates with limited professional opportunities locally. Many identified job shadowing, summer internships, and programs like the City of Williamsburg's Life After College as potential catalysts to better connect recent graduates to regional employment opportunities. Connecting soon-to-be college graduates to young professional networks such as Young Emerging Professionals of Greater Williamsburg (YEP) is another mechanism to root young professionals in place.** Retaining graduates is an opportunity area for the Greater Williamsburg region. According to the College of William & Mary, approximately 64 percent of the William & Mary class of 2018 is from the commonwealth of Virginia and may desire to stay within the commonwealth upon graduation
- ✓ **Social Enterprises:** Greater Williamsburg is home to a number of mission-driven organizations that have the capacity to attract young professional and millennial populations into the Greater Williamsburg area. These organizations are non-traditional talent magnets. Non-profit organizations such as GuideStar, the National Center for State Courts, and AidData are capable of building new skill capacities that would otherwise not be present within the region. AidData alone boasts a highly technical workforce capable of processing and analyzing big data. While social enterprises do not directly contribute to the region's local tax digest, these organizations should be seen as an asset that can catalyze development of new workforce capabilities.
- ✓ **Office Product: During public input, stakeholders reported mixed viewpoints regarding the region's supply of office product. To some, vacant Class A office space was seen as a major competitive disadvantage for the region – only built-to-suit opportunities were seen as readily available. To others, Greater Williamsburg was seen as having sufficient office product to meet current and future demand. Survey respondents also did not give clear indication that availability of quality office space was an advantage or disadvantage for the community. Exactly 44.8 percent of survey respondents rated the region's availability of quality office space as "neutral."**
- ✓ **Air Transportation Capacity:** With the loss of low-cost carriers at Newport News/Williamsburg International Airport, regional air transportation capacity has declined in recent years. According to the United States Bureau of Transportation Statistics, passenger departures are down nearly 20 percent over a one-year period between April 2015 and April 2016. The decline is likely due to the

drop in scheduled flight departures – which also declined by approximately 20 percent during the same time period. Flight departures also decreased at the Richmond International Airport.

EMPLOYMENT TRENDS

Employment trends within Greater Williamsburg's professional and technical services sector highlight three core niches: **Management and Operations Services**, **Engineering and Technical Consulting**, and **Creative Design**. The management and operations niche encapsulates a broad range of activities that improve organizational efficiency and operations including accounting, bookkeeping, and payroll services; management consulting services; and management of companies and enterprises. Engineering and technical consulting captures a host of activity including research and development, engineering services, and geographic mapping companies. Finally, creative design businesses are typically associated with the creative economy such as architecture, advertising, graphic design, and interior design.

- ✓ **Only a handful of professional and technical services sectors have experienced growth over the last decade.** Growth in the management consulting services (65.7 percent), management of companies and enterprises (64.7 percent), computer systems design and related services (24.0 percent), interior design services (10.7 percent), other services related to advertising (273.7 percent), and all other professional, scientific, and technical services (179.2 percent) counterbalanced employment losses experienced in other subsectors. Overall regional professional and technical services employment growth (14.5 percent) underperformed relative to the national average (34.3 percent).
- ✓ Taken along with the community's quality of life offerings, the rise of management of companies and enterprise employment in the region signal that Greater Williamsburg is an attractive destination for regional offices and headquarters. **However, as the Partnership seeks to attract these headquarters operations to the region it should be mindful and selective in the types of opportunities it pursues.** For instance, administrative offices of manufacturing headquarters locations tend to generate a negligible tax base. Such operations should only be targeted if they will lead to follow-on investment such as the relocation or expansion of production or warehousing operations.
- ✓ **The Great Recession was a turning point for the regional engineering services sector.** In the five years leading up to the Great Recession, engineering services companies added 297 employees representing a gain of 61.4 percent. This rate of growth, however, would not continue after the recession. In 2016, engineering services employment remains 356 jobs below peek employment (780 jobs achieved in 2007). Overall, engineering services employment ended the last decade (2006-2016) down more than 280 jobs, a decline of 40.2 percent. The decline is particularly concerning give the strength of the engineering services sector nationally (7.8 percent) over the same time period.
- ✓ **Greater Williamsburg's professional and technical services workers tended to earn well below their national counter parts.** In 2016, the average professional and technical services employee earns roughly $62,664 annually, or more than 30 percent below the national average ($90,647).

Even considering cost of living differentials between Greater Williamsburg and other areas of the country, the wage differential between the region and the national average is significant given the highly mobile nature of professional and technical services talent who can choose to work anywhere.

Professional & Technical Services Employment Trends, 2006-2016

NAICS	Description	Location Quotient	Jobs (2016)	Net Change in Jobs (06-16)	% Change in Jobs (06-16)	Net Change in Jobs (16-26)	% Change in Jobs (16-26)	US % Change in Jobs (06-16)	Average Wages (2016)	% of U.S.
Management and Operations Services										
54161	Management Consulting Services	1.16	681	270	65.7%	277	40.6%	40.0%	$68,183	83.1%
55111	Mgmt. of Companies and Enterprises	1.26	1,302	511	64.7%	200	15.4%	26.0%	$64,479	55.7%
54121	Accounting/Tax Prep. And Bookkeeping^	0.53	292	-13	-4.4%	31	10.7%	13.1%	$51,169	80.7%
54111	Offices of Lawyers	0.39	279	-11	-3.6%	37	13.2%	-5.0%	$54,239	61.6%
Engineering and Technical Consulting										
54133	Engineering Services	0.94	424	-285	-40.2%	156	36.7%	7.8%	$66,689	73.7%
54134	Drafting Services	0.81	<10	NA	NA	NA	NA	-19.4%	NA	NA
54151	Computer Systems Design/Related Svcs.	0.50	483	93	24.0%	449	93.0%	50.3%	$73,863	72.9%
54162	Environmental Consulting Services	0.30	13	-5	-28.1%	-2	-13.4%	11.7%	$31,111	47.6%
54137	Surveying/Mapping Svcs.*	1.18	25	-36	-58.4%	-11	-41.4%	-33.2%	$45,607	85.3%
54171	R&D in the Physical/Eng./Life Sciences	0.18	52	-51	-49.7%	2	4.0%	12.7%	$54,980	41.0%
54172	R&D in the Social Sciences/Humanities	5.58	158	121	327.4%	21	13.2%	-5.8%	$71,986	101.7%
54169	Other Scientific/Tech. Consulting Svcs.	0.98	108	-7	-5.9%	12	11.0%	58.2%	$64,448	87.0%
Creative Design										
54131	Architectural Services	0.51	47	-61	-56.4%	-15	-32.3%	-10.6%	$45,494	59.5%
54132	Landscape Architectural Services	0.98	24	-5	-16.1%	-5	-21.8%	-14.1%	$36,095	77.9%
54143	Graphic Design Services	0.69	44	-4	-8.6%	-6	-13.9%	-1.0%	$33,978	80.7%
54141	Interior Design Services	1.02	43	4	10.7%	-2	-5.5%	-2.4%	$20,228	55.3%
54181	Advertising Agencies	0.12	12	-40	-76.7%	0	0.0%	8.7%	$55,903	60.9%
54189	Other Services Related to Advertising	1.06	52	38	273.7%	20	37.9%	32.1%	$42,257	78.7%
54149	Other Specialized Design Services	0.37	<10	NA	NA	NA	NA	27.4%	NA	NA
Supporting Sectors										
56111	Office Administrative Services	0.34	78	-21	-21.4%	9	12.0%	33.7%	$72,703	89.5%
56121	Facilities Support Services	2.57	174	-30	-14.6%	108	62.2%	17.5%	$64,419	131.0%
56149	Other Business Support Services	0.51	31	15	89.7%	6	19.4%	5.1%	$43,110	88.3%
54199	All Other Professional/Sci./Tech. Svcs.	1.20	124	79	179.2%	80	64.5%	83.7%	$42,696	58.7%
	Total	**0.81**	4,447	**563**	**14.5%**	**1,201**	**1,366**	**34.3%**	**$62,664**	**69.1%**
	Total, All Industries		**72,452**	**1,744**	**2.5%**	**10,886**	**15.0%**	**4.8%**	**$35,448**	**71.1%**

Source: Economic Modeling Specialists Intl. (EMSI)
*Excludes Geophysical Mapping
^Includes Payroll Services

- ✓ **While wages for professional and technical services workers are well below the national average, Greater Williamsburg's professional and technical services talent tends to be more entrepreneurial than the average community nationwide.** In 2016, roughly 14.6 percent of professional and technical services workers in Greater Williamsburg were self-employed. Nationally, only 13.4 percent of professional and technical services workers were self-employed.

The higher ratio of self-employed workers within the target sector may also explain a portion of the wage differential between the region and national annual average wages.

Even so, the self-employment data does give opportunity to the region's economic development activities related to promoting and strengthening a culture of entrepreneurship within the Greater Williamsburg region.

OCCUPATIONAL TRENDS: GREATER WILLIAMSBURG'S LABOR SHED

Professional and technical services businesses employ a diverse workforce with various skill sets and knowledge bases ranging from chief executives to operations research analysts. Within a 50-mile commute time, Greater Williamsburg boasts an 83,709 professional and technical services workforce.

The following are key occupational trends within the target sector, for a full list of the occupations that comprise the professional and technical services sector please see appendix A:

- ✓ **Technology companies relocating or expanding in the Greater Williamsburg area may find a limited pool of qualified applicants within the region's labor shed.** In 2016, employment concentrations of computer and information systems managers (LQ = 0.71), computer and information analysts (0.76), software developers and programmers (0.59), database and systems administrators and network architects (0.83), and computer support specialists (0.76) were well below the national average (1.00). **The limited availability of technology talent is having an impact on regional employers. Roughly a quarter of business leaders responding to the online survey who identified that they had trouble finding qualified employees over the last five years citied challenges with finding qualified information technology workers.**
    - ❖ Technology attraction opportunities in Greater Williamsburg may further be limited by the clustering of information technology employment in the Greater Richmond region. Employment among computer and information systems managers (LQ = 1.16), computer and information analysts (1.45), software developers and programmers (0.97), database and systems administrators and network architects (1.36), computer support specialists (1.03) were more concentrated in Greater Richmond.
- ✓ **Employers seeking to fill executive and managerial positions may also encounter a limited supply of qualified applicants.** Employment concentrations among chief executives (LQ = 0.60), general and operations managers (0.78), financial managers (0.58), and human resources managers (0.70) were 22 percent to as much as 42 percent below the national average (LQ = 1.00) in 2016. Regional offices and headquarters relocations or expansions will likely be required to attract talent from outside of the region – potentially increasing relocation or expansion costs.
- ✓ **From an occupational composition viewpoint, Greater Williamsburg does have a robust pool of potential professional and technical services talent below the managerial level.** Compliance officers (LQ = 1.34), cost estimators (1.59), management analysts (1.39), budget analysts (1.81), and first-line supervisors of office and administration workers (1.00) were sufficiently concentrated to support additional professional and technical services business activity.

TRAINING PROGRAMS

Driven by the College of William & Mary, Greater Williamsburg possesses dynamic training capacity to develop a homegrown professional and technical services workforce. The College offers a wide variety of degree offerings including business management and administration, accounting, computer and information technology, and other STEM fields. The region's training capacity is further enhanced by two-year degree capacity at Thomas Nelson Community College that can lead to a four-year degree at the College of William & Mary.

- ✓ With strong partnerships between the College of William & Mary and the University of Virginia, Thomas Nelson Community College students can complete a two-year degree before transitioning to a four-year university environment. Two-year programs of particular interest to professional and technical services employers include:
  - ❖ **Accounting** – Thomas Nelson Community College's accounting program prepares students to take the American Institute of Professional Bookkeepers (AIPB) national certification exam and covers fields of study including payroll accounting, fraud examinations, and computer accounting applications.
  - ❖ **Administrative Technology Support** – A wide-range of office administrative tasks are covered in the Administrative Technology Support program. Subjects covered under the program include office administration, editing and proofreading, database management, and advanced desktop publishing.
  - ❖ **Business Administration** – TNCC's business administration program is structured to ensure graduates are able to continue their degree at a four-year institution. Classes include core curriculum as well as business classes such as accounting and economics.
  - ❖ **Information Technology** – The information technology associates degree covers e-commerce, software design, and web design preparing students for entry level positions in the information technology sector.
  - ❖ **Paralegal Studies** – The two-year paralegal degree program prepares students for careers in criminal, business, constitutional, and family law.
- ✓ Complementing Thomas Nelson Community College's course offerings is a suite of College of William & Mary degree programs that increase the professional and technical services talent pool regionally:
  - ❖ **Accounting** – The accounting program at William & Mary prepares students for a variety of careers in the private and public spheres. Federal taxation, strategic cost management, and tax compliance are a few of the many subjects covered during the program.
  - ❖ **Business Analytics** – Offered through the Mason School of Business, the business analytics program prepares students for the growing field of analytics and data science. Subjects covered in the program include big data analytics, business intelligence development, and modeling among others.

- **Applied Statistics** – Information technology businesses, especially data science firms, increasingly require candidates with strong statistics background. William & Mary's applied statistics program teaches students to collect, analyze, interpret, and present data.
- **Computer Science** – Computer science programs are the foundation of a healthy, robust information technology sector. Along with undergraduate programs, the Department of Computer Science offers advanced degree programs at the master's and doctoral level.
- **Finance** – Graduates of William & Mary's finance program learn about equity markets, portfolio management, international finance, and private equity/venture capital among others.
- **Marketing** – Graduates of William & Mary's marketing program are prepared for marketing careers that increasingly use digital media to spread messaging. Consumer behavior and advertising strategic development is also a core focus of the program.

MARKETING IMPLICATIONS

The professional and technical services target is a growth sector for the Greater Williamsburg region. In terms of "community fit," the target sector represents a good match with both community perceptions and its quality of life. **Many stakeholders throughout public input indicated information technology and professional services companies as ideal candidates for attraction – especially given the relatively low impact information technology and professional services relocations can have on the environment and community aesthetic.**

- ✓ **Robust training capacity and a lack of strong concentrations in many professional and technical services occupations signals what many public input participants highlighted during focus group input – the region's higher education graduates often don't stay in Greater Williamsburg upon graduation.** Since a qualified workforce is an integral input of professional and technical services operations, retaining William & Mary graduates is critical to the continue the health of the sector. Internships and contract work are possible avenues to retain graduates.
  - Capturing the region's computer science graduates can make the region a more attractive destination for information technology operations. The College of William & Mary produced 66 computer and information sciences graduates and 58 mathematics and statistics graduates in 2015 according to the National Center for Education Statistics.
- ✓ Along with growing the pool of information technology talent in the region, Greater Williamsburg should also ensure adequate information technology infrastructure to support data science and analytics firms who typically require sizable bandwidth to obtain and distribute large data sets. Information technology firms also typically desire redundant capacity to maximize uptime and reduce utility costs. According to the National Telecommunications and Information Administration, Williamsburg (9th out of 134 counties), James City County (18th), and York (23rd)

ranked favorably compared to other Virginia communities in provider coverage of at least three broadband wireline providers.

- ✓ As stated in earlier portions of this report, congestion along I-64 could limit Greater Williamsburg's ability to tap professional and technical services talent pools within the city of Richmond and Norfolk. As travel times increase, prospective employees may look for opportunities close to home, even if they offer reduced pay scales. **Encouraging alternative work arrangements and expanding transit and transportation capacities could make the region a more attractive destination to professional and technical services firms.**
- ✓ Airport capacity at both the Newport News/Williamsburg and Richmond International Airports is a limiting factor for recruitment of certain corporate and headquarters operations. C-suite executives typically desire regions served by major "hub" airports.
- ✓ **According to the KPMG and the Tax Foundation, tax structure in the commonwealth of Virginia is advantageous to corporate headquarters.** The organizations found that the commonwealth's effective tax rate for a mature (12.0 percent) corporate headquarters is the 12th lowest out of 50 states. However, the commonwealth's tax structure could deter research and development headquarters recruitment – the effective tax rate of R&D headquarters operations (13.5 percent) ranked 35th out of 50 states. Greater Williamsburg should also be mindful of the impact of headquarters relocations on the tax bases of local municipalities.

4. Tourism

Definition and Overview: With deep historical ties to the American Revolution and Colonial America, the Greater Williamsburg regional economy and tourism sector are strongly intertwined. Tourism activity within the Greater Williamsburg region encompasses not only public and private entities that leverage the region's rich history but is also inclusive of businesses that provide visitors with memorable amusement, entertainment, culinary, and hospitality experiences. Along with businesses that impact the traveler's experience when visiting the region, the tourism target also captures businesses that assist travelers with their travel arrangements.

Local Companies: The following companies are an inclusive, but not exhaustive, list of tourism businesses in the Greater Williamsburg region: The Colonial Williamsburg Foundation, Jamestown-Yorktown Foundation, Busch Gardens Williamsburg, Great Wolf Lodge, and Kingsmill Resort.

Near-Term Niches: Three niches compose the Greater Williamsburg tourism target: **Hospitality**, **Traveler Engagement**, and **Arts and Culture**. Businesses within the hospitality niche are responsible for ensuring traveler comfort during their stay including providing hotel, motel, and resort accommodations; catering and culinary experiences; and personal pampering services. On the other hand, the traveler engagement and arts and culture niches are associated with businesses and non-profit operations typically thought of as tourism magnets – these businesses are responsible for generating visitation to the region.

Long-Term Niches: As the region continues to evolve its tourism product, tourism businesses and organizations responsible for the success of the tourism sector will look to build new amenities and reposition existing assets in order to attract new visitors to the Greater Williamsburg region. Potential opportunities exist in **Sporting Events** and **Outdoor Recreation**.

Character Considerations: The sheer number of historical sites and locations throughout the Greater Williamsburg region remains an important component of its tourism product. Perhaps the centerpiece of Greater Williamsburg's historical sites is Colonial Williamsburg, a living-history museum where visitors can experience the tradition of Colonial America.

National Trends: According to the World Economic Forum's 2015 Travel and Tourism Competitiveness Report, the travel and tourism sector is estimated to outpace financial services, transport, and manufacturing growth globally. As indicated by the Forum, key issues facing the tourism sector include slow global economic growth and growing terrorist threats that could impact individuals' willingness to travel within their home country or abroad. Even so, these issues were seen as not yet impacting growth within the global tourism sector. Economic Modeling Specialists Inc. estimates that the tourism sector will add roughly 2 million new jobs nationally (10.5 percent) between 2016 and 2026. While the national outlook of the tourism sector is positive, low wage employment remains a long-standing issue within the sector. In 2016, the average tourism worker ($21,913 average annual wage) earned well below the national average ($49,863) for all business sectors. To boost the potential for high wage tourism opportunities,

communities throughout the nation have pursued a wide range of specialized tourism activates including medical tourism, sports tourism, and other specialized tourism segments.

LOCATION CONSIDERATIONS AND ADVANTAGES

Due to the events at the Battle of Yorktown, Greater Williamsburg is forever engrained as a destination to learn about the American Revolution and Colonial America. As preserved sites brought tourists interested in learning about the revolutionary war to the region, living history museums arose to further enhance the traveler experience. At the same time, the sheer amount of preserved land further affords the region with a wealth of natural beauty and opportunities to promote recreational tourism.

- ✓ **Land Preservation and Recreation:** Communities with historical sites of national significance typically have large tracts of preserved land and forests held by the state or federal government. While preservation can impact capacity to accommodate new development, preserved land is also an asset. According to the Virginia Department of Forestry, local, state, and federal governments owned approximately 24,444 acres of Greater Williamsburg timberland in 2015. Combined, approximately one fourth of timberland in the region was local, state, and federally owned. The bulk of this preserved forestry space is located in York County.

  The wealth of preserved land and water amenities in the Greater Williamsburg supports a diverse array of outdoor recreational activities including hiking activities along Virginia Capital Trail, Powhatan Creek Trail, and the Colonial Parkway. Moreover, activities at the Virginia Institute of Marine Science may provide opportunities for eco-tourism in the Greater Williamsburg region.

- ✓ **Historical Sites and Museums:** As the first permanent English settlement in the Americas and the home to the concluding battle of the American Revolutionary War, the Greater Williamsburg region is the foundation of American history. The region hosts a wealth of historic sites and museums including but not limited to Yorktown Battlefield, Colonial Williamsburg, Yorktown Victory Center, the Jamestown Settlement, and the Muscarelle Museum of Art. **Although the region is home numerous historical sites and museums, stakeholders in Greater Williamsburg question whether these sites will continue to generate visitation or appeal to new, diverse audiences. Stakeholders noted that Greater Williamsburg's historical ties project a conflicting message between what the community is and what it wants to become.**

- ✓ **Amusement and Entertainment:** Complementing the region's historical sites and museums is a host of amusement attractions and entertainment amenities. Attractions such as Busch Gardens Williamsburg and Water Country USA continue to be important tourism magnets while new entertainment amenities such as the Virginia Beer Company and Copper Fox Distillery are opening new avenues for tourism visitation and market appeal.

EMPLOYMENT TRENDS

Tourism activity in the Greater Williamsburg area can be divided into three niches: **Hospitality**, **Traveler Engagement**, and **Arts and Culture**. Hospitality businesses provide hotel, resort, and other traveler

accommodations as well as culinary and personal care services to travelers. Greater Williamsburg's traveler engagement niche captures business activity among the community's entertainment magnets such as Busch Gardens and Water Country USA. Organizations and independent artists within the arts and culture niche add further depth to the tourism experience by reenacting historic events or creating engaging experiences through intimate performances.

Tourism Employment Trends, 2006-2016

NAICS	Description	Location Quotient	Jobs (2016)	Net Change in Jobs (06-16)	% Change in Jobs (06-16)	Net Change in Jobs (16-26)	% Change in Jobs (16-26)	US % Change in Jobs (06-16)	Average Wages (2016)	% of U.S.
Hospitality										
5615	Travel Arrangement/Reservation Svcs.	0.79	81	-85	-51.3%	-12	-14.5%	-9.9%	$22,990	43.6%
5617	Services to Buildings and Dwellings	1.58	2,023	-42	-2.0%	224	11.1%	13.9%	$22,601	94.9%
7211	Traveler Accommodation	2.98	2,546	-1,639	-39.2%	-556	-21.8%	4.6%	$22,334	76.1%
7223	Special Food Services	2.23	767	-224	-22.6%	5	0.6%	12.3%	$25,419	113.8%
7225	Restaurants and Other Eating Places	1.62	7,660	1,540	25.2%	587	7.7%	22.1%	$17,352	101.4%
8121	Personal Care Services	1.14	648	70	12.1%	93	14.4%	12.9%	$22,160	112.7%
Traveler Engagement										
7112	Spectator Sports	0.31	28	0	-1.5%	0	-1.1%	9.8%	$12,253	11.0%
7113	Promoters of Performing Arts/Sports*	0.52	34	11	46.8%	20	60.3%	44.8%	$74,093	196.8%
7131	Amusement Parks and Arcades	31.23	2,987	853	40.0%	236	7.9%	33.3%	$16,432	63.6%
7139	Other Amusement/Recreation Industries	1.74	1,076	141	15.1%	-10	-0.9%	16.6%	$19,760	100.8%
Arts and Culture										
7111	Performing Arts Companies	0.94	61	35	140.1%	56	92.3%	2.5%	$34,418	85.5%
7115	Indep. Artists/Writers/Performers	1.66	221	76	52.6%	24	10.8%	0.8%	$11,714	31.9%
7121	Museums/Historical Sites/Similar Instit.	23.61	1,713	14	0.8%	423	24.7%	27.0%	$35,208	106.1%
	Total	**1.99**	**19,845**	**749**	**3.9%**	**1,091**	**5.5%**	**10.5%**	**$20,631**	**94.1%**
	Total, All Industries		**72,452**	**1,744**	**2.5%**	**10,886**	**15.0%**	**4.8%**	**$35,448**	**71.1%**

Source: Economic Modeling Specialists Intl. (EMSI)
*Includes similar events

- ✓ **Low wage employment opportunities are emblematic of the tourism sector.** On average, Greater Williamsburg's tourism workforce earned almost $15,000 below the regional average annual wage. An abundance of part time work and the seasonality of employment opportunity diminish capacity to earn a living wage within the sector. Nationally, tourism workers earned just $21,914 annually in 2016.
- ✓ **The abundance of historical sites, living museums, and entertainment attractions engender specialization within the visitor engagement niche.** In 2016, museums, historical sites, and similar institutions (23 times more concentrated than the national average), amusement parks and arcades (31 times more concentrated), and traveler accommodations (three times more concentrated) were highly specialized in the regional economy. Supporting specialization is an atypical mix of occupations and professionals who maintain historical sites and artifacts along with occupations typically associated with the tourism sector.
- ✓ **Although tourism is a growth sector for the Greater Williamsburg region, tourism employment growth is underperforming relative to the national average.** Over the last decade (2006-2016),

the nation's tourism sector grew by 10.5 percent, outperforming the regional average (3.9 percent) by approximately 6.6 percentage points. **Underperforming tourism employment growth supports stakeholders' concerns about the impact of declining historical visitation on the region's tourism economy. Some stakeholders view the region's tourism sector in a state of flux as it adapts to new consumer behavior in the tourism sector. Many expressed excitement about the new restaurants, breweries, and distilleries that are evolving the region's tourism product and enhancing its quality of life.**

- Nationally, a 2012 report from the National Endowment for the Arts does support stakeholder input regarding declining historic site visitation. According to the Survey of Public Participation in the Arts, 23.9 percent of national respondents toured a park, monument, building, or neighborhood of historic or design value in 2012 – down a percentage point from the same survey conducted in 2008.
- There is also indication that historical visitation is declining regionally. In 2005, the Colonial Williamsburg Foundation sold 734,000 tickets to Colonial Williamsburg attractions. In 2015, the Foundation reported ticket sales of 574,300. **Nevertheless, Stakeholders expressed optimism that new leadership at the Colonial Williamsburg Foundation will positively impact visitation to Colonial Williamsburg and widen its appeal to a broader audience.**

OCCUPATIONAL TRENDS: GREATER WILLIAMSBURG'S LABOR SHED

Supporting Greater Williamsburg's tourism sector is a host of occupations that maintain and preserve historical sites, provide accommodations and hospitality services, and directly influence the traveler experience. Almost 75,000 workers within the Greater Williamsburg labor shed are employed in occupations that could be leveraged for new and existing tourism businesses.

The following are key occupational trends within the target sector, for a full list of the occupations that comprise the tourism sector please see appendix A:

- ✓ **Other sectors of the regional economy utilize the same talent pools as the tourism sector, causing shortages for particular skill sets. During focus group input, major employers in the Greater Williamsburg region noted that they often compete for general skill sets including housekeeping, building maintenance, and grounds keeping staff. This is a particular concern among major employers in tourism, higher education, and healthcare sectors.** Occupational employment data does indicate that the region's labor shed may not have sufficient concentrations of workers with these skill sets relative to the average community nationwide.

  Employment concentrations of first-line supervisors of building and grounds cleaning and maintenance workers (one percent less concentrated), building cleaning workers (six percent less concentrated), and grounds maintenance workers (twelve percent less concentrated), and general maintenance and repair workers (three percent less concentrated) were below the national average concentrations signifying a potential capacity issue.

- ✓ **Lower wages earned by tourism occupations potentially exacerbate workforce shortages**. With limited transportation alternatives, Greater Williamsburg's tourism labor shed is likely smaller than the 50-minute catchment area analyzed for this report. Put simply, it is likely that a 50-minute commute to and from work is economically unjustifiable for a portion of the region's tourism workforce. Of those occupations with shortages identified by stakeholders, only two paid an average hourly wage above $15.00: first-line supervisors of building and grounds cleaning and maintenance workers ($16.51 average hourly wage) and general maintenance and repair workers ($17.31).
- ✓ **High wage opportunities within the tourism sector do exist and are typically related to management, supervisory, and historical-site related occupations.** In 2016, food service managers ($27.36 average hourly wage); lodging managers ($30.62); archivists, curators and museum technicians ($22.60) earn above the average for the region's entire labor shed ($21.16). Moreover food service managers (29.2 percent above) and lodging managers (27.3 percent above) out earned their respective national counterparts.
- ✓ **Greater Williamsburg's effort to expand its culinary offerings is influencing occupational employment growth.** From 2009 to 2019, the region's tourism labor shed increased by 6.0 percent, adding 4,413 more workers regionally with skill sets desirable to the tourism sector. A large portion of this growth is attributable to occupational growth in the food services sector. Employment growth among fast food and counter workers (1,040 jobs gained), cooks (588), and supervisors of food preparation and serving workers (330) accounted for roughly four out of every ten tourism jobs gained in the regional labor shed.

TRAINING PROGRAMS

Developing tourism talent is usually outside of the purview of many higher education institutions who must often justify training costs with expected post-graduate earnings. Although this excludes training programs for many tourism occupations, the distinct nature of Greater Williamsburg's tourism assets does open the path for high earnings potential and training programs that prepare students for careers in select tourism fields.

- ✓ Along with the management occupations discussed in the preceding section, William & Mary offers a handful of degree programs that could lead to careers in the museum and historical preservation fields:
  - ❖ **Anthropology** – William & Mary's anthropology program is an interdisciplinary course that ties other programs and institutions into its training program including American Studies, Native Studies, History, Music, and the Colonial Williamsburg Foundation.
  - ❖ **History** – Students in William & Mary's history program have access to an award winning faculty and it is one of the top places in the nation to study American Colonial History.

- ❖ **Marine Science (Minor)** – The Marine Science minor teaches students about the complexity of marine ecosystems. The program is jointly offered by the Virginia Institute of Marine Science (VIMS) and the College of William & Mary.

- ✓ Although already discussed in previous sections, Thomas Nelson Community College offers a variety of business programs that could lead to work in the tourism sector. Aside from those programs already discussed, TNCC offers training in HVAC equipment maintenance and repair.
- ✓ The Peninsula Council for Workforce Development offers one of the only regional training programs focused on the tourism and hospitality industry. Through its partner organizations, the Council holds customer service training seminars twice a year.
- ✓ The Greater Williamsburg Chamber and Tourism Alliance's Prepare-Care-Share program is a 4-hour training course focused on developing customer services skills in the region's hospitality sector. Through the course, participants experience Greater Williamsburg's major attractions so as to better connect with travelers on a more personal level during their stay in Greater Williamsburg.
- ✓ While Greater Williamsburg does not possess significant training capacity for hospitality occupations, higher education institutions throughout the Virginia Beach region do offer hospitality related degree programs. Old Dominion University offers degree programs in Parks and Recreation Management, Tourism Management, Therapeutic Recreation, and Sport Management.

MARKETING IMPLICATIONS

With organizations already engaged in the promotion of tourism and branding the Greater Williamsburg region, the Partnership should find the best avenue to integrate business recruitment efforts with the "Find Your Freedom" campaign. The Partnership can also leverage Greater Williamsburg's tourism assets to support economic diversification and disseminate its message that Greater Williamsburg is open and ready for business.

- ✓ Tourism marketing shapes national perceptions about the quality and character of a community as well as the community's attractiveness as a destination to visit or live. **Through the Greater Williamsburg Chamber and Tourism Alliance, the Partnership can leverage existing tourism promotion which markets the region's attractiveness as a place to not only visit but also to grow a business.**
- ✓ **Leveraging the region's tourism assets in new and innovative ways could better connect the region's rich history to young audiences.** Civic hackathons or partnerships with William & Mary, Colonial Williamsburg, and entrepreneurs could lead to the development of new apps and augmented reality technologies that enhance the visitor experience.
- ✓ The large volume of preserved land and the Virginia Institute of Marine Science's preservation of marine ecosystems could allow for future ecotourism opportunities.

- ✓ Improving transportation connectivity may improve tourism employers' access to tourism talent pools far outside the Greater Williamsburg region. Affordable transportation options are critical to the tourism sector's workforce given the low average annual wages they earn.
- ✓ **The Partnership should support food and beverage entrepreneurship opportunities that directly impact the growth and diversification of the regional tourism sector.** Such activities align with the economic development authorities in the region – particularly as they relate to the redevelopment of dilapidated or blighted commercial property in the Greater Williamsburg region.
- ✓ **Expansion of tourism-related training capacity at regional higher education institutions will strengthen talent pipelines for hospitality, traveler engagement, and arts and culture businesses.** While first-line tourism occupations typically offer low earnings potential, hoteliers and managers within the tourism sector command high wages. For instance, lodging managers in the Greater Williamsburg region earned $33.08 per hour on average – approximately $9.00 an hour more than their national counterparts ($24.05). As capacity expands, the Partnership should ensure programs are not duplicative of those within the broader Virginia Beach region.
- ✓ **Improving air capacity and connectivity at airports servicing the Greater Williamsburg region could allow tourism businesses to tap new markets.** Declining air capacity at the Newport News/Williamsburg International and Richmond International Airports is a concern for the health and sustainability of the region's tourism sector. Loss of low cost carriers, such as Frontier Airlines, has impacted air capacity at the Newport News/Williamsburg International Airport. According to the United States Bureau of Transportation Statistics, passenger departures at Newport News/Williamsburg International Airport are down nearly 20 percent over a one year period between April 2015 and April 2016. Scheduled flight departures declined 2.0 percent at the Richmond International Airport over the same one year period.

5. Defense

Definition and Overview: Greater Williamsburg's defense sector is defined by numerous United States Armed Forces instillations in and proximate to the region. Armed forces institutions in and near the Greater Williamsburg region include Yorktown Naval Weapons Station, Naval Supply Center – Cheatam Annex, Camp Peary, Joint Base Langley-Eustis, and the U.S. Coast Guard Training Center. Much of the region's defense employment is housed within these military instillations as well as a sizable presence of civil servants supporting military operations. Compared to the public sector, Greater Williamsburg's private sector defense employment is far smaller and is driven by not only private defense contractors who benefit from close proximity to their customer base but also former military retirees turned entrepreneurs who have developed sustainable businesses around their defense expertise.

Local Employers: Federal military employment is largely representative of Greater Williamsburg's defense sector with a handful of private defense companies located in and proximate to the region: Yorktown Naval Weapons Station; Joint Base Langley-Eustis; and Air Vehicle Integrated Design (AVID LLC).

Near-Term Niches: As one of the nation's largest sustainable energy consumers, the Department of Defense is seeking energy flexibility in a dynamic global environment. Greater Williamsburg could leverage United States Armed Services demand for sustainable energy potentially leading to private sector growth. From a workforce availability standpoint, Greater Williamsburg makes a compelling case for locating **Sustainable Energy** operations, particularly in the nuclear energy space, in Greater Williamsburg. At the same time, the region should continue to promote private sector growth of **Defense Contractors**.

Long-Term Niches: Over the long-term, the region can build up capacity to support a **Cybersecurity** sector. Much like the data science and analytics niche, Greater Williamsburg will need to establish an engrained, competitive workforce of information technology professionals before the niche becomes a marketable opportunity. Cybersecurity firms ensure integrity of computer systems infrastructure and prevent intrusion from unwanted third parties.

Character Considerations: Greater Williamsburg community stakeholders frequently identified the region's military and state and government research institutions as a potential opportunity for innovation-led economic development. While many noted that relatively few companies have spun out of nearby government research institutions, stakeholders still view these institutions as untapped potential.

National Trends: Historically steady, the defense sector is undergoing turbulence as the United States military and the defense sector adjust to shifting threats, tightening federal military spending, and the emergence of new battlefields. Government sequestration has had an important impact in curtailing defense budgets and spending. According to the World Bank, the United States military expenditures accounted for 3.3 percent of the nation's total gross domestic product in 2015. In 2010, the highest level of spending as a percentage of GDP, national defense expenditures reached 4.7 percent of national GDP. As defense threats expand, the United States Armed Services continue to seek efficiencies and optimize military operations – the most impactful and visible process for communities across the nation is the Base Realignment and Closure (BRAC). In a March 2016 report, the Department of Defense estimated it has

excess capacity of 22 percent for its physical base infrastructure and has asked Congress for a new BRAC round. As the Department of Defense optimizes capacity the tools at its disposal are shifting to meet reduced force size and emerging threats. Cybersecurity is a growing concern for the United States Armed Forces who recently established the U.S. Cyber Mission Force, a command dedicated to attack and defend computer systems around the world.

LOCATION CONSIDERATIONS AND ADVANTAGES

Greater Williamsburg provides an advantageous strategic location proximate to numerous military instillations and multiple branches of the Armed Services. The region is an attractive destination for small-to-medium sized military contractors who gain competitive advantages from being located near their customer base – proximity is especially necessary for highly technical, sophisticated defense contracts. At the same time, retiring and discharged military personal provide a sustaining pool of defense entrepreneurs and potential defense contractors.

- ✓ **Military Veterans and Entrepreneurship: During public input, small businesses and entrepreneurs in the Greater Williamsburg region indicated that former military veterans are continuing work after retirement and leveraging their military experience to start and run successful defense contracting firms.** The Hampton Roads Chamber of Commerce estimates that 13,000 military personnel from military institutions throughout the Virginia Beach region enter the private sector each year. Moreover, the United States Census Bureau estimates that the Greater Williamsburg region is home to approximately 20,000 military veterans – representing 17.2 percent of its total population in 2014. Whether starting their own business or entering into a private sector business, military personal bring with them highly specialized skill sets, established relationships within the military chain of command, and knowledge of military procurement practices and regulations.
- ✓ **Defense Infrastructure:** From a private sector viewpoint, defense contractors share many similarities with professional and technical services companies. Class A office space and sufficient broadband connectivity are essential requirements to defense contractors and defense instillations operating outside of military bases. **According to the online community survey, only 31.7 percent of respondents identified the region's availability of high-speed internet as a disadvantage or a major disadvantage while 19.8 percent indicated that availability of quality office space was a disadvantage or major disadvantage. Even so, stakeholders during public input noted that defense contractors tend to favor locations outside of the Greater Williamsburg region – signifying that there may be barriers to defense contractor growth in the region.** As the Greater Williamsburg Partnership seeks to recruit defense contractors, it should remain mindful of potential competitor areas proximate to the region – such as City Center at Oyster Point.
- ✓ **Transportation Options:** Large employers, whether military or otherwise, require interconnected transportation systems for their workers. A lack of transportation options, specifically as it relates to public transit, can lengthen commute times and can negatively impact employee productivity. While data is not available for the Greater Williamsburg region specifically, data from the United

States Census Bureau does indicate a small rise in the percentage of residents in the Virginia Beach region who experience a commute time to work of 45 minutes or greater.

- ✓ **Defense Supply Chain:** According to an economic impact analysis conducted by the Hampton Roads Planning District Commission, defense-related spending activities compose a sizable portion of the region's economy (41.2 percent) and generate $35.2 billion in gross regional product. Understanding where this money is being spent could inform business attraction, retention, and expansion practices in the Greater Williamsburg region. Outside of the manufacturing sector, the United States Armed Services in the Virginia Beach region were large purchasers of professional services according to supply chain data from Economic Modeling Specialists International. In 2013, the United States Armed Services in the Virginia Beach region consumed approximately $985 million in engineering services, $947 million in research and development, $293 million in computer systems design services, and $192 million on administrative management and general management consulting services. Much of these services were acquired within the region – approximately 59.7 percent of services sourced were within the Virginia Beach region.

EMPLOYMENT TRENDS

Outside of Armed Services employment, Greater Williamsburg's defense sector shares many commonalities with the professional and technical services sector. Sophisticated military operations rely on a knowledge-based workforce as the defense supply chain data demonstrated. From computer systems design to logistics consulting, regional capacity is budding to better capture the professional services purchasing activity generated by the numerous military instillations in and around the Greater Williamsburg region. Its core niches are: **Military** and **Defense Contractors**.

- ✓ **Greater Williamsburg capacity to support defense-related cybersecurity operations will be limited in the near to medium-term.** At present, custom computer programming services (LQ = 0.30), computer systems design services (LQ = 0.71), and computer facilities management services (LQ = 0.42) sectors in Greater Williamsburg are unspecialized and unlikely to be attractive to technology-related defense firms.
- ✓ **However, growth in computer systems design services subsector could lead to future capacity to support such activities.** Over the last decade (2006-2016), computer systems design services employment grew by 57.1 percent, adding 116 jobs regionally. While the subsector underperformed relative to the national average (62.8 percent), employment projections indicate that regional subsector growth could outpace national growth over the next decade.
- ✓ **Logistics consulting services activity is specialized in Greater Williamsburg.** Although firms within the process, physical distribution, and logistics consulting services subsector may serve other business sectors, the nature of naval operations at the Yorktown Naval Weapons Station would indicate a demand for logistics consulting services. Process, physical distribution, and logistics consulting services in Greater Williamsburg is twice as concentrated as in the average community nationwide, denoting a localized competitive advantage in Greater Williamsburg.

- ✓ **Decline within the region's defense sector is a concern.** Employment loss was primarily driven by two subsectors: engineering services and federal military employment. From 2006 to 2016, engineering services employers shed 285 jobs, or 40.2 percent of their workforce. Similarly, federal military employment decreased by 229 jobs, or 10.2 percent. The decline of the region's defense sector is particularly troubling given the high average annual wages ($59,956) earned by defense sector workers and military personnel.

Defense Employment Trends, 2006-2016

NAICS	Description	Location Quotient	Jobs (2016)	Net Change in Jobs (06-16)	% Change in Jobs (06-16)	Net Change in Jobs (16-26)	% Change in Jobs (16-26)	US % Change in Jobs (06-16)	Average Wages (2016)	% of U.S.
541330	Engineering Services		424	-285	-40.2%	156	36.7%	7.8%	$66,689	73.7%
541511	Custom Computer Programming Services		128	-37	-22.6%	15	11.9%	48.9%	$81,558	78.9%
541512	Computer Systems Design Services		320	116	57.1%	417	130.5%	62.8%	$72,165	71.6%
541513	Computer Facilities Management Services		14	NA	NA	8	52.4%	21.1%	$51,593	60.0%
541519	Other Computer Related Services		21	3	17.7%	9	43.0%	8.7%	$68,434	68.5%
541611	Admin. Mgmt./General Mgmt Consulting Services		267	34	14.8%	63	23.6%	45.0%	$62,404	67.9%
541614	Process/Physical Distrib./Logistics Consulting Svcs.		128	101	364.9%	67	52.1%	46.2%	$88,282	131.5%
541690	Other Scientific and Technical Consulting Services		108	-7	-5.9%	12	11.0%	58.2%	$64,448	87.0%
541712	Research/Development in the Physical and Eng.*		47	-42	-46.9%	2	3.3%	10.9%	$52,678	42.3%
901199	Federal Gov., Civilian, Excld. Postal Service		1,104	88	8.7%	-60	-5.5%	10.9%	$58,460	71.3%
901200	Federal Government, Military		1,996	-228	-10.2%	-37	-1.9%	2.9%	$53,769	110.0%
	Total, Target Sector		**4,558**	**-242**	**-5.1%**	**651**	**14.3%**	**11.2%**	**$59,956**	**72.9%**
	Total, All Industries		**72,452**	**1,744**	**2.5%**	**10,886**	**15.0%**	**4.8%**	**$35,448**	**71.1%**

Source: Economic Modeling Specialists Intl. (EMSI)
NA = Not Available
*Includes life sciences except biotechnology

OCCUPATIONAL TRENDS: GREATER WILLIAMSBURG'S LABOR SHED

Within a 50-mile drive time, Greater Williamsburg's defense employers have access to a highly technical workforce. Approximately 74,000 workers were employed in occupations that would be attractive to relocating or expanding defense sector employers and businesses. Greater Williamsburg's occupational composition further supports the region's attractiveness to **Defense Contractors**, but also indicates potential opportunities in **Sustainable Energy**.

- ✓ According to Bloomberg New Energy Finance, the Pentagon was the nation's second largest consumer of alternative energy sources including solar, wind, biomass, and waste – consuming approximately 600 megawatts of renewable power purchase agreements. Only Google purchased more long-term contracts for renewable power. Greater Williamsburg could leverage the Pentagon's demand for sustainable energy in the future. Existing workforce concentrations could companies engaged across a wide range of sustainable energy production, particularly those servicing the defense sector.
  - ❖ Compared to the average community nationwide, Greater Williamsburg possessed high concentrations of nuclear engineers (LQ = 17.84) and nuclear technicians (2.36) – likely

driven by the nuclear demands of naval operations at the Yorktown Naval Weapons Station as well as private engineering firms within the region. Other sustainable energy occupations were less concentrated. Concentrations among solar photovoltaic installers (LQ = 1.12) and wind turbine service technicians (LQ = 0.43) were proximate to or below the national average (LQ = 1.00).

- ❖ While the Virginia Institute of Marine Science is focused on coastal and estuarine science, it could serve as an attractive resource for firms generating sustainable energy from tidal forces or oceanic sources.

- ✓ **Logistics consulting companies that provide services to the defense sector could find the region an attractive destination due to the availability of logistics occupations regionally.** In 2016, logistician occupations were 2.6 times more concentrated regionally than the average community nationwide while employment among buyers and purchasing agent was 1.5 times more concentrated.

- ✓ **Information technology skill-sets are shrinking in the Greater Williamsburg region, potentially impacting its capacity to leverage military investment and contracting related to cybersecurity.** Over the last decade, the region's information technology workforce declined by 62 positions leaving the region's total information technology workforce at approximately 9,500 workers. Moreover, employment concentrations were lower than the average community nationwide in almost all information technology occupations. Only concentrations among computer and information research scientists (LQ = 2.57) would be considered sufficient to accommodate new or expanding technology-related defense contracting operations.

TRAINING PROGRAMS

Along with higher education institution programs, Greater Williamsburg's defense sector is aided by significant training capacity within the United States Armed Services. These programs complement higher education training capacity discussed in previous sections of this report.

- ✓ Joint Base Langley-Eustis houses a variety of commands that support United States Training Activity across the United States and globe:

  - ❖ **U.S. Army Training and Doctrine Command** – The U.S. Army Training and Doctrine Command (TRADOC) is responsible for recruiting and training soldiers as well as developing adaptive leaders in the military and civilian spheres. TRADOC is also responsible for establishing Army doctrine and oversees 32 Army schools under eight Centers of Excellence.

  - ❖ **Army Training Support Center** – Through 400 soldiers, civilians, and contractors, the Army Training Support Center manages the Army Training Support Enterprise by providing oversight to programs that develop, deliver, and sustain training and education across the United States Army.

- The United States Coast Guard Training Center Yorktown provides training to thousands of Coast Guard personnel in the techniques and applications of the modern Coastguard. Training programs cover a wide array of specialties including machinery maintenance, electrical systems, and marine science among others.

MARKETING IMPLICATIONS

The presence of military activity within the Greater Williamsburg region and the broader Virginia Beach region is both a blessing and a curse. On the one hand, the large volume of defense spending in the region supports defense contractors and service providers throughout the Greater Williamsburg region. On the other hand, the region's defense sector is closely tied to rises and falls in federal defense spending. Sequestration and an ever-tightening defense budget is, however, not the only risk to the sustainability of the region's defense sector. As the United States Armed Forces continually adjust their operations to meet the nation's strategic defense needs, certain communities and defense contractors stand to benefit while others could be left behind.

- ✓ **The Greater Williamsburg Partnership should continue to support lobby efforts engaged by the Hampton Roads Military and Federal Facilities Alliance (HRMFFA).** A future Base Realignment and Closure (BRAC) round remains uncertain. The Department of Defense has identified the need for base closures, but the United States legislative branch is mulling cost effective alternatives. Engaging in business retention and expansion practices with the region's military employers is also a potential avenue to improve the community's attractiveness for United States Armed Services military operations.
- ✓ Attracting, developing, or expanding sustainable energy or cybersecurity businesses could leverage the United States Armed Forces' current needs while growing private sector defense activity. Cybersecurity firms in particular will require a robust information technology workforce. At present, information technology skill sets is an area of critical need for the Greater Williamsburg region. Improving talent attraction and, perhaps more appropriately, retaining graduates from the College of William & Mary, could assist in expanding the region's pool of qualified information technology workers.
- ✓ Logistics employment in the region is highly concentrated compared to the average community nationwide. Defense contractors or service providers may find Greater Williamsburg's pool of logisticians and purchasing agents attractive.
- ✓ **Mapping defense-related purchasing activity could give insight into the types of firms that may be attracted to Greater Williamsburg.** Tapping these supplier networks will identify businesses that gain value from being located proximate to the region's military instillations.
- ✓ **Developing startup defense businesses and leveraging military retirees could allow Greater Williamsburg's defense sector to grow from within.** Transitioning self-employed defense contractors to employer firms could enhance defense-related expansion and relocation activity.

- ✓ **The Greater Williamsburg region should prepare for the eventual loss of its HUBZone status.** As a replacement, the Greater Williamsburg region should pursue defense production zones authorized by the commonwealth of Virginia. Communities throughout the commonwealth can establish local defense production zones to incentivize businesses engaged in the design, development, or production of materials, components, or equipment required to meet the needs of the national defense. Companies that are ancillary to or support these tasks can also qualify for incentives offered through the program.
    - ❖ Defense production zone allow municipalities to create special incentives and certain flexibility for qualified businesses in the zone such as reduction of user and permit fees, special zoning treatment, exemption from local ordinances, or other incentives adopted by ordinance.
    - ❖ While the Greater Williamsburg region has two census tracts that qualify under the Small Business Administration's Historically Underutilized Business Zones (HUBZone), the SBA recently updated HUBZone designations in May 2016. Under the updated zones, both census tracts in Greater Williamsburg are considered "redesignated tract areas" and will lose HUBZone designation within the next three years.
        - ▪ Under the HUBZone program, government contractors must remain in a HUBZone in order to receive the benefits of the program. Once a former HubZone loses its designation, government contractors located in the former zone are viewed as non-compliant under the program.

MARKETING RECOMMENDATIONS

The identification of target sector opportunities is an initial step for the Greater Williamsburg Partnership on its path to attract and recruit businesses looking to relocate or expand operations. The next step is to utilize this information to effectively communicate Greater Williamsburg's value proposition as a place to do business. This message should incorporate the strengths of the region, particularly as it relates to quality of life, sense of place, and workforce capacities. The challenge before the Greater Williamsburg Partnership is not only to communicate its value proposition to a wider audience, but to do so in a way that leverages the region's existing tourism marketing activity. Without careful coordination, both messages run the risk of becoming muddled.

Economic development marketing activities engaged by the Greater Williamsburg Partnership represents an expansion of existing regional economic development capacity. While each of the municipalities of the City of Williamsburg, James City County, and York County run effective economic development programs, there remains no organization dedicated to communicating Greater Williamsburg's business case to broader national and international audience. **Community and business stakeholders responding to the online community survey indicated that the region's economic development marketing capacity is insufficient. Approximately half of all survey respondents rated Greater Williamsburg's success at "marketing the community to potential businesses considering relocation" as either unsuccessful or very unsuccessful. In comparison, only 12.0 percent of survey respondents rated the community's success at "marketing the community to potential visitors (travelers and tourists)" as unsuccessful or very unsuccessful.** Community and business stakeholder input should not be surprising as the 2010 Economic Diversification in America's Historical Triangle report identified the region's absence of marketing to businesses as a key competitive concern. An effective marketing message ensures that the region speaks with one voice and communicates a single message.

Of course, economic development marketing is more than just communicating a business case to external audiences. Successful communities with effective marketing programs align internal capacities to accommodate new business growth. Ensuring a sustainable workforce pipeline, preserving land for industrial and office use, and engaging in extensive community development are a handful of efforts engaged by effective regional economic development organizations. Put simply, economic development marketing is not only about crafting the right message and getting that message to the right audience it is also about improving upon the product that it markets.

The following marketing recommendations and considerations are placed into three primary categories:

- ✓ **External Marketing –** The Greater Williamsburg Partnership is charged with shifting national business community perceptions that Greater Williamsburg is only a destination for visitors or that Greater Williamsburg is simply a tourism community. Effective marketing tactics are covered within the External Marketing category.
- ✓ **Organizational Capacity –** Economic development marketing is more than projecting Greater Williamsburg's value proposition to a broader business audience. Indeed, reaching preferred

audiences is only half the challenge. Greater Williamsburg must also be prepared to accommodate requests for proposals, establish protocols for responding to requests for proposals, and establishing mechanisms that can hasten the development review process. These issues along with the internal capacity at the Greater Williamsburg Partnership itself are addressed in this category.

- ✓ **Product Development -** At the end of the day, establishing Greater Williamsburg's business case relies on effectively marketing the community's assets and attributes. Product development recommendations focus on avenues to enhance the region's economic development product and assets.

Since the Greater Williamsburg Partnership is focused on building its economic development marketing capacity, *Market Street* has only provided recommendations for external marketing. However, organizational capacity and continued product development in Greater Williamsburg will be critical marketing efforts. As a result, potential avenues for advancing the region's organizational capacity to accommodate new development and expand its economic development product are also discussed.

EXTERNAL MARKETING

Greater Williamsburg has a story to tell beyond its quality of life and numerous place-based amenities. The Greater Williamsburg region houses operations of Fortune 500 companies including Anheuser-Busch InBev, Wal-Mart, Owens-Illinois, Owens & Minor, and Enterprise Holdings. At the same time, the region supports numerous small to medium sized advanced metals and components manufacturers, food and beverage manufacturers, and professional and technical services companies. This is all to say that the region is not solely a tourist destination or place to retire – but a location to conduct and grow business. To spread this message, the Greater Williamsburg Partnership should engage in marketing activities that occur across multiple channels. Given the importance of relationships within the economic development profession, these marketing activities should emphasize face-to-face communications.

Economic development marketing activities should incorporate and align with all current or planned programs and activities engaged by the economic development authorities of the City of Williamsburg, James City County, and York County. Economic development retention, expansion, and development programs are increasingly an important component of business recruitment efforts. Marketing activities should similarly align with tourism promotion activities engaged by the Greater Williamsburg Chamber and Tourism Alliance.

1.1 Enhance and improve the Greater Williamsburg Partnership website to reflect the community's key competitive advantages.

The most important aspect of the Greater Williamsburg Partnership's economic development marketing activities is its web presence. A 2014 survey of site selectors and corporate decision makers by Development Counsellors International found that 67 percent of business executives and those charged with site selection decisions identified an economic development organization's website as the most effective marketing technique at a community's disposal. An economic development organization (EDO) website is often the front door to the community – a first

impression to site selectors, prospective companies, and future residents. In many respects, a website is the initial standard by which communities and organizations are judged. The online presence of an economic development organization must be its most polished marketing tool. Websites are typically the point of first contact for prospects and site selection professionals, who will only contact a community (either directly or through a state agency) once a short list of destinations, has been developed. Therefore, economic development websites must be graphically compelling, user-friendly, logically designed and structured, and provide a wealth of timely information on all aspects of the regional economy, population, physical assets, and quality of life and place amenities.

The Greater Williamsburg Partnership website gives the appearance of a professionally staffed organization capable of handling site selection and business location inquiries of all shapes and sizes. The Greater Williamsburg Partnership should ensure that its current web presence continues to be dynamic, consistently updated, interactive, and user-friendly. Given the professional quality of the website, only minor alterations are recommended to the Greater Williamsburg Partnership website including the following:

- ✓ Upon approval, the Greater Williamsburg Partnership should enhance its website and tailor its content to support target sectors and key competitive strengths identified throughout this report.
- ✓ The Greater Williamsburg Partnership should consider updating the home or landing page of the website to direct users to key pieces of information or highlight the region's competitive strengths as well as incorporate links to tourism promotion organizations including the Greater Williamsburg Chamber and Tourism Alliance and other entities where appropriate
    - ❖ At present, the homepage successfully portrays the region's logistics and distribution capacity – however, it could better communicate Greater Williamsburg's strengths in terms of its scientific and engineering labor pool, research and development capacity proximate to the region, and advantages as a hub for professional and technical services.
    - ❖ On initial glance, the Partnership homepage does not adequately communicate where the community is located within the United States or what constitutes the "Greater Williamsburg" area. For someone with familiarity with the region, the home page content flows naturally, but an outsider may have trouble understanding which communities the Greater Williamsburg region represents.
    - ❖ Given water availability concerns, highlighting Stonehouse Commerce Park may not be an ideal candidate to display so predominately on the Partnership's home page. Alternatively, proprieties in Green Mount Industrial Park may be a more appropriate property to feature.
- ✓ Workforce information contained within the Greater Williamsburg Partnership website should be greatly expanded and encapsulate the broader Greater Williamsburg labor shed.

- ✓ The Greater Williamsburg should scan the website to ensure that it is free of typos or other errors.
  - ❖ Links to external websites should be checked for accuracy, ensuring that links lead to desired pages.

1.2 Continue to promote the Greater Williamsburg region through social media channels.

Leveraging social media as a tool for business and economic development marketing is a relatively new practice, but one that is expanding and evolving every year. Organizations that are able to capitalize on new and dynamic tools with flexibility, discretion, and targeted success can reach new markets and building trust and communication among existing audiences. There are many reasons for economic practitioners to utilize social media networks and tools; principal among them is being able to contribute and guide online conversations that are shaping how communities are perceived and promoted.

Greater Williamsburg Partnership should continue and expand its **social media** presence across several venues. Accounts to be maintained include LinkedIn, Twitter, and Facebook. Greater Williamsburg Partnership may consider alternative social media platforms including Instagram and Periscope and reevaluate social media platforms on an annual basis.

1.3 Identify opportunities to promote the Greater Williamsburg region as a place to do business through third-party media channels.

Through "**earned media**," communities win coverage by reaching out to and interacting with a third-party channel. This type of coverage carries the most legitimacy and authenticity as it is part of an ongoing information flow. Of course, "earned media" cannot be controlled and can, at times, be negative. The proverbial "buzz" is a type of earned media, and usually the result of a strategic media relations effort. To identify and generate "earned media," the Greater Williamsburg Partnership could work with the Greater Williamsburg Chamber and Tourism Alliance, Colonial Williamsburg, or Busch Gardens Williamsburg to identify areas of "earned media" opportunities between the Partnership and its tourism organizations.

The recent BuzzFeed article chronicling a trip from the Williamsburg neighborhood in Brooklyn to Williamsburg, Virginia is an example of the potential for "earned media" to generate attention especially in its capacity to connect to young audiences. Establishing a point of contact for third party media outlets may further facilitate earned media opportunities.

1.4 Identify high-value marketing mission and external trip locations for lead generation.

Planned trips to corporate executives should be scheduled to locations that can serve as fertile prospect markets for the advancement of Greater Williamsburg's target sectors. Destinations should include areas identified through supply chain mapping, business retention and expansion visits, or the headquarters of a corporation with a presence already in the Greater Williamsburg region.

Comprehensive research should be conducted to determine travel locations that yield the highest value.

Both international and national trip visitation should be coordinated with the Virginia Economic Development Partnership and other key personnel at the commonwealth of Virginia to ensure external trips generate adequate return on investment. Moreover, the Virginia Economic Development Partnership sponsors numerous international travel opportunities – it is recommended that the Greater Williamsburg only travel to international countries with strong ties to the region or are major trading partners with the Port of Virginia. Upcoming international opportunities include:

- ✓ Italy Technology Expo 2016
- ✓ United Kingdom Technology Expo 2016
- ✓ Trade Mission to Colombia and Peru
- ✓ Trade Mission to India
- ✓ Trade Mission to Poland and Czech Republic

Corporate headquarter leads are typically generated through state-level economic development departments. Building close relationships with the commonwealth's economic development representatives will likely improve corporate headquarter lead generation for the Partnership. At the same time, the Greater Williamsburg Partnership should focus its planned visitation on hub and regional offices that align with the business sectors identified in the Professional and Technical Services target definition.

1.5 Leverage Greater Williamsburg's attractiveness as a place to visit by hosting corporate decision-makers and site selection professionals.

The Greater Williamsburg Partnership can leverage **in-bound marketing opportunities** that play to the community's strengths as a tourism destination. Planned excursions to locations throughout the Greater Williamsburg region will allow the Partnership to develop relationships with visiting executives, business owners, and site-selection professionals. Hosting site selectors in Greater Williamsburg should be done in concert around high profile or one-time events. The Greater Williamsburg Chamber and Tourism Alliance will likely be a strong partner in identifying opportunities and ensuring success of any in-bound marketing activities engaged by the Greater Williamsburg Partnership. Such in-bound marketing opportunities include the following:

- ✓ LPGA Kingsmill Championship
- ✓ Williamsburg Fall Arts
- ✓ Busch Gardens Bier Fest
- ✓ Williamsburg Harvest Celebration
- ✓ Yorktown Victory Celebration

Along with these in-bound opportunities, the Greater Williamsburg Partnership should continue to leverage the William and Mary homecoming as a potential lead generation resource. Former alumni

who are now in leadership positions at their company may be influenced to relocate company operations to the region or may know of other business leaders who are seeking a quality of life improvement. Further, the Greater Williamsburg Partnership may also attract targeted industry conferences to the region – allowing the Partnership to display the region's quality of place offerings while building relationships within key leaders in its targeted industry sectors.

1.6 Work with economic development professionals in the Greater Williamsburg region and at the Virginia Economic Development Partnership to plan high value external travel opportunities.

Typically associated with industry sectors (aviation, biotechnology, etc.) or real estate associations (NAI, SIOR, CORENET, etc.), these shows and events can be ways to invest in marketing opportunities geared towards local target sectors or communicate to site consultants and real estate professionals the community's competitive strengths and targeted opportunities. While they can be useful, these trips are often cost-intensive (travel, booth display, marketing materials, etc.) and crowded, with hundreds of competing communities vying for attendees' attention. Local communities should always try to piggyback trips with regional or state organizations that might help shoulder the financial burden. On the whole, marketing missions tend to provide more value than these industry events and should be prioritized as necessary.

Conferences and meetings that align with the Greater Williamsburg Partnership's adopted target sectors should only be attended in coordination with state economic development partner organizations. Securing resources to attend high-value meetings with partners from the Virginia Economic Development Partnership (VEDP) could enhance the effectiveness of trade show, conference, and meeting attendance. Upcoming industry specific conferences and meetings sponsored by the VEDP include the following:

- ✓ AUSA Annual Meeting and Exposition
- ✓ Innovative Energy Solutions for Military Applications 2016
- ✓ ISDEF 2017
- ✓ Feria Aeroespacial México

During the first year of implementation, it is advised that staff from the Greater Williamsburg Partnership solely attend conferences and meetings throughout the southeastern region– that align with its target sectors and niche opportunities. As financial resources build out in years two through five, it is recommended that Greater Williamsburg Partnership focus its travel and marketing activities on an equal mixture of international and domestic conferences and meeting attendance.

1.7 Tailor marketing materials and sales "pitches" to reflect marketing implications for each target sector identified within the Greater Williamsburg Target Sector Analysis.

Economic development marketing materials and approaches must be tailored to each individual industry sector currently targeted by the Greater Williamsburg Partnership. All business sectors are not created equal. An executive of an advanced materials and components manufacturer may find production workforce capacity, industrial electricity rates, and proximity to the Port of Virginia as

critical location factors while another executive in the professional and technical services sector may find the region's scientific and technical workforce an influential consideration guiding a relocation or expansion decision. Throughout the Greater Williamsburg Target Sector Analysis are key marketing implications for each sector, which should shape and inform marketing material, tactics, and "sales pitches."

Similarly, the Greater Williamsburg Partnership should develop "talking points" that discuss the challenges and solutions to key regional economic development issues including but not limited to: water availability, existing economic development product, information technology workforce capacity, and transportation infrastructure among others. Site selectors and corporate executives often know about community challenges well before they visit the region – what is important is not the challenges themselves but whether the community is proactively addressing its most critical economic development challenges.

1.8 Leverage existing business visitation to identify supplier relationships that can drive business recruitment.

The Greater Williamsburg Partnership should leverage existing economic activities engaged by the economic development authorities of the city of Williamsburg, James City County, and York County to adapt and evolve economic development marketing strategies. More specifically, the Greater Williamsburg Partnership should attend high-value existing industry visits along with appropriate economic development staff to both understand the advantages and challenges of businesses operating within its target sectors as well as identify important supply chain linkages that could lead to new business recruitment opportunities.

As economic development marketing strategies engaged by the Greater Williamsburg Partnership become more sophisticated, the Partnership should engage in a more extensive and detailed process of mapping supply chains within each target sector. Supply chain mapping can inform planned trips to executives or high-value conferences or meetings.

1.9 Pursue co-branding opportunities with the economic development authorities of Greater Williamsburg.

Business executives and site selectors look for communities that "sing with one voice." This is to say, they actively assess a community's capacity to work together to recruit, retain, or expand their business operations. Visiting business executives and site selectors constantly search for conflicts in the community, especially in multi-jurisdictional regions. Adopting a common brand among the economic development authorities of the city of Williamsburg, James City County, and York County could further cement regional cooperation and send a positive message to corporate executives or site selectors. The economic development authorities should seek approval from their respective boards and local elected leadership before moving forward. To gain support, the Partnership should communicate the importance of a shared brand as well as the potential value it could generate among a broader business audience.

- ✓ To reduce cost, the economic development authorities of Greater Williamsburg could augment the existing partnership logo to incorporate their organization. Alternatively, the economic development authorities could hire a design consultant to develop co-branded logos, marketing material, and other marketing collateral.

1.10 Develop a distribution protocol for leads generated by the Greater Williamsburg Partnership.

Regional economic development organizations throughout the United States handle lead generation differently. However, each process conforms to the relationships and norms of the local region. In some regions, only communities with attractive sites that fit lead criteria are given opportunity to respond to a request for proposal. In others, each community underneath the economic development marketing umbrella is given opportunity to respond to all requests for proposals – ensuring fair competition and limiting potential for favoritism (perceived or otherwise). The economic development authorities of Greater Williamsburg should reach an agreement on how leads generated through Greater Williamsburg Partnership's activities will be distributed as well as establish the protocol for responding to these proposals. Lead distribution protocol should be established before the Greater Williamsburg Partnership actively engages in external marketing activities.

1.11 Communicate economic development incentive offerings that support target sector development.

Regional economic development organizations typically collect and report all incentive programs applicable to prospective businesses looking to relocate into the region. Marketing materials and electronic collateral offered by the Greater Williamsburg Partnership should act as a one-stop source for all incentive programs offered by municipal economic development authorities as well as applicable state incentive programs. For instance, the Partnership website does not currently list commonwealth discretionary programs, such as the Commonwealth's Development Opportunity Fund, which is designed as a "deal closing" fund to secure company location or expansion in Virginia, on its website. Other potential incentive programs to advertise include the Virginia Economic Development Incentive Grant, the Corporate Income Tax Credit, and workforce development training incentives such as customized training programs offered through the commonwealth's community college network.

Along with these incentive programs, the Greater Williamsburg region may seek new designations under current commonwealth incentive programs. Obtaining one or more technology zone or defense zone designations can supplement the region's efforts to expand shovel-ready sites in the region. Qualified businesses locating or expanding operations in a zone can receive a variety of local waivers including permit and user fees, local tax incentives, special zoning treatment, or exemption from ordinances. Such designations can supplement efforts to develop shovel-ready sites within the Greater Williamsburg region.

1.12 Confirm that the Greater Williamsburg Partnership needs to be the point-of-contact for the Greater Williamsburg region.

Often times, economic development professionals at the state or national level desire a point person that acts as the day to day contact for a region. Along with day to day communication, a regional point-of-contact is similarly responsible for managing relationships with state and national economic development partners as well as the site selection community. The economic development authorities should identify an appropriate point-of-contact for the Greater Williamsburg region.

ORGANIZATIONAL CAPACITY

External marketing activities engaged by the Greater Williamsburg Partnership will require time and resources. There are a variety of methods in which the regional economic development authorities can meet the time and resource requirements of the Greater Williamsburg Partnership. At present, the Greater Williamsburg Partnership is a shared responsibility between the economic development authorities of Greater Williamsburg. While there is nothing inherently wrong a cooperative marketing model, filling out at least basic staff capacity at the Greater Williamsburg Partnership will establish accountability for marketing effectiveness, lead generation, and prospect management. Further, staff capacity at the Greater Williamsburg Partnership should lighten the load of the municipal economic development authorities allowing them to focus on other economic development activities.

Establishing and filling an executive director position at the Greater Williamsburg Partnership would allow the region's economic development authorities to focus their economic development efforts on existing operations including business retention, expansion, and development while providing an oversight role in the Partnership's economic development marketing activities. Due to the core mission of the Greater Williamsburg Partnership, the executive director's roles and responsibilities should be heavily focused on economic development marketing and project initiation:

- ✓ Oversee efforts involving external and internal marketing, public relations, website development and maintenance, branding and graphic identity, and serve as the Partnership's point of contact to investors and the media.
- ✓ Coordinate scheduling of prospect visitation, mission trips, inbound marketing events, and other high value marketing initiatives.
- ✓ Provide point-of-contact services for economic development leads generated through the Virginia Economic Development Partnership, Launchpad, and other sources if desired by the economic development authorities of Greater Williamsburg.
- ✓ Coordinate with the Virginia Economic Development Partnership to ensure that the Greater Williamsburg Partnership's target sectors are integrated into national and international marketing efforts, initiatives, websites, and collateral.
- ✓ Build relationships with economic development organizations in the Hampton Roads and the Richmond regions and identify mutually beneficial advocacy positions.
- ✓ Report the status of ongoing projects and prospects/lead management to the regional organization's public and private partners.

Ideal candidates should have strong economic development project manager experience, possess strong interpersonal skills with the ability to build relationships across multiple constituencies, and possess robust knowledge of all available economic development incentives offered in the commonwealth of Virginia, and hold familiarity with the Greater Williamsburg region.

Along with the executive director, the Greater Williamsburg Partnership could consider the addition of an assistant to help carry out the roles and responsibilities of the director. The assistant would be responsible for social media campaigns, website maintenance, staffing target council meetings, and communicating with staff from the economic development authorities of Greater Williamsburg.

Other organizational considerations include creation of "target sector councils" that support existing business retention and expansion efforts in the Greater Williamsburg region and, at the same time, inform economic development marketing strategies.

Economic development business attraction practices are shifting towards a "continuing care" model whereby the economic development organization maintains close contact with the relocated or expanded company. This shift is largely due to the realization among corporate executives that economic development organizations are only around "when they need something from me or I need something from them." While the Greater Williamsburg Partnership will likely not possess adequate staff capacity to develop a fully-fledged continuing care operation, it could establish "target sector councils" as a substitute in lieu of a "continuing care" model. Many great leads come from existing firms.

Target Sector Councils would be charged with identifying core issues of their target sector and work collectively to address these issues. The economic development authorities of the Greater Williamsburg region would likely need to devote staff capacity to support council facilitation.

Finally, throughout public input, business stakeholders, entrepreneurs, and real estate developers acknowledged the significant regulatory burden of opening a business in the Greater Williamsburg region. Development review processes from initial submittal to final approval can often take a prohibitively long time to complete. As the Economic Diversification Task Force stated in its 2010 Economic Diversification in America's Historical Triangle report "Our normal bureaucratic processes in re-zoning and site approval make it difficult to predict if and when projects might be approved." **Online survey respondents tended to agree, 49.1 percent rated the region's "ease and speed of permit review process" as disadvantageous.** An expedited review process could reduce the turn-around time for economic development projects deemed critically important to the region's economic growth and diversification. Components of the expedited review process may include:

- ✓ Designation of a "project concierge" to assist the applicant through the expedited approval process.
- ✓ Establishment of an "expedited review" team composed of appropriate staff from the municipalities of the city of Williamsburg, James City County, and York County to address development review issues in a single expedited process.

- ✓ Hold a preliminary review meeting with the architect, developer, and/or project applicant to resolve any code interpretation questions.
- ✓ Provide mechanism for "next day" inspection services throughout the design review process.

Expedited review processes can often take considerable staff time and energy to complete along with requiring municipal governments to redefine permitting review protocols. This is to say that expedited review processes should not be taken lightly. As a result, the Greater Williamsburg Partnership along with its municipal partners should establish specific criteria that would qualify economic development projects for an expedited review process. Potential criteria may include:

- ✓ Project's capacity to positively impact the region's economic diversification
- ✓ Project's capacity to promote sizable job creation in the region
- ✓ Project's capacity to provide high-wage opportunities to regional residents
- ✓ Project's capacity to positively diversify tax base of the local municipality in which it will locate

The municipalities could create a metric-driven "grading system" that qualifies projects to undergo expedited review. Business relocation and expansion projects that fall within the **Advanced Materials and Components**, **Food and Beverage**, **Professional and Technical Services**, and private sector **Defense** businesses should be given priority under the grading system. Given the desire to diversify the regional economy, **Tourism** businesses should not qualify for the expedited review process. The expedited review process should act as a supplement to a shovel-ready sites program.

PRODUCT DEVELOPMENT

Economic development marketing is not simply about selling a community to outside audiences. High performing economic development organizations understand that "what" they are featuring in marketing campaigns and initiatives is as important as "how" they sell it or "who" they sell it to. This is to say that economic development organizations charged with marketing their community are actively engaged in developing the product and advancing workforce and community development initiatives that place their communities on a sustainable path to prosperity. As a new organization with limited staff capacity and a limited mission, the Greater Williamsburg Partnership will likely possess only some capability to improve and expand the regional asset base. However, over the near-term, there are a few key influence areas that the Greater Williamsburg Partnership could actively support through partner organizations.

Economic Development Product: Although the region may not have the desire to attract a "mega" project, the economic development authorities of the Greater Williamsburg region and the Greater Williamsburg Partnership should continue to work toward expanding the region's capacity to accommodate new business growth. A relative lack of attractive, shovel-ready sites can undermine a community's capacity to effectively recruit new corporate investment and, to some extent, support the expansion of businesses already in the Greater Williamsburg region. Given the limited available land in the city of Williamsburg, these efforts will likely rely on the municipalities of James City County and York County. However, as

identified by the Economic Diversification Task Force, the economic development authorities of Greater Williamsburg could work towards a shared-revenue business park for office or industrial users.

Establishing a small work group composed of economic development authority representatives, private sector businesses, commonwealth economic development officials, relevant local government staff and leadership, and utility providers could assist efforts to expand the region's economic development product. The work group would ideally review existing inventory, prioritize sites for evaluation and improvement, and begin to work towards higher levels of readiness as defined by the Virginia Business Ready Sites Program.

As regional economic development authorities and the Greater Williamsburg Partnership seek to build out its economic development product, it could leverage funds offered through the Virginia Business Ready Sites Program potentially culminating in at least one Tier 5 site as defined by the site ready program.

Workforce Development: The Greater Williamsburg region unquestionably has critical skill gaps within its regional labor shed. For instance, information technology businesses are unlikely to find Greater Williamsburg a desirable destination due to limited workforce availability. While the region should engage in talent attraction efforts, retaining existing graduates could prove a less challenging and more cost effective method to expand the regional workforce and fill critical skill gaps. The Greater Williamsburg Partnership could support existing talent retention efforts already occurring in the region including the City of Williamsburg's Life After College program. Along with these supporting efforts, the Greater Williamsburg Partnership may also look towards new retention programs that focus on particular skill gaps and connect higher education students to internship and job shadowing opportunities at employer firms throughout the region.

Advocacy: The Greater Williamsburg Partnership could leverage its status as a 501(c) 6 organization to pursue issue positions that positively impact regional economic growth and development. Such an agenda should work in partnership with institutions or advocacy organizations in the region – such as the Greater Williamsburg Chamber and Tourism Alliance, the College of William & Mary, Thomas Nelson Community College, the United States Armed Forces, and Peninsula Council for Workforce Development among others – to ensure that the region speaks as one voice.

During its advocacy efforts, the Greater Williamsburg Partnership will likely identify areas of opportunity and mutual interest with economic development and advocacy organizations within the Hampton Roads Corridor and the Greater Richmond region. The Partnership should seize upon these opportunities where appropriate. As a mid-point between the Greater Richmond region and the Virginia Beach region, Greater Williamsburg could benefit from improved connection and cooperation between and among both regional economies.

Place-making: Although "bricks and mortar" continues to be an important criteria for relocating and expanding companies, talent availability and workforce quality are now equality important in location decision-making. Businesses are increasingly worried about the overall impact of the retirement of the baby boom generation as it relates to capacity to support and grow their business operations. As a result, communities across the country are relying on the quality of their built environment and entertainment

amenities to recruit and retain talent and businesses alike. The Greater Williamsburg Partnership should support place-making efforts engaged by the municipalities throughout the Greater Williamsburg region including the revitalization of dilapidated or blighted commercial properties.

To support place-making efforts, the Greater Williamsburg Partnership could spend a portion of its attraction and retention activities recruiting smaller companies that enhance place-making efforts regionally. These opportunities will likely be among small batch food and beverage companies who can fit into existing zoning without running into significant non-conforming use issues. Along with attraction efforts, the region may investigate the viability of a commercial kitchen in the Greater Williamsburg region to promote homegrown food and beverage companies.

Conclusion

The Great Recession represented a turning point for economic diversification within the Greater Williamsburg region. Like many communities throughout the nation, Greater Williamsburg must find a new path towards economic sustainability. In finding this path, the Greater Williamsburg region is not without its guide-posts. The region is home to numerous marketable assets that can entice new businesses to relocate or expand their operations within the Greater Williamsburg region. These assets extend well beyond the region's quality of life – and include a diverse mix of scientific, engineering, and technical knowhow, an internationally renowned education institution, budding culinary scene, and destinations forever engrained in the national consciousness. As the Greater Williamsburg region looks to the future, it must also look to opportunities outside of its geographic and administrative boarders. As a midpoint between the Greater Richmond and Virginia Beach regions, the Greater Williamsburg regional economy could stand to prosper if both economies were more strongly intertwined. Improving economic relationships between the Greater Richmond region and the Virginia Beach region could yield increased economic activity for communities in the Greater Williamsburg region so long as its infrastructure and development can sustain and accommodate new growth.

This Greater Williamsburg Target Sector Analysis is only a starting point for advancing regional prosperity. Once begun, it is a process that will require significant attention now and long into the future. The dividends of its activities will promote the economic security and wellbeing of the region's current and future residents as well as their posterity.

Appendix A: Occupational Tables

Advanced Materials and Components, Workforce Trends 2006-2016

SOC	Description	2016 Jobs	2016 LQ	10-Year Jobs Change	U.S. 10-Year Jobs Change	Median Hourly Earnings	U.S. Ratio
Production Occupations							
11-3050	Industrial Production Managers	304	0.65	-9.6%	-8.2%	$49.29	110.1%
11-3060	Purchasing Managers	198	0.99	5.8%	2.0%	$54.04	106.3%
11-3070	Transportation, Storage, and Distribution Managers	270	0.86	6.8%	7.4%	$47.03	115.3%
13-1080	Logisticians	929	2.57	17.1%	9.5%	$36.33	101.7%
15-1110	Computer and Information Research Scientists	173	2.32	19.2%	23.6%	$49.55	96.3%
15-1140	Database and Systems Administrators and Network Architects	1,486	0.83	-1.7%	8.9%	$38.39	96.7%
17-2010	Aerospace Engineers	602	3.12	25.4%	3.7%	$55.64	107.9%
17-2040	Chemical Engineers	42	0.45	-13.9%	2.1%	$41.54	88.2%
17-2060	Computer Hardware Engineers	142	0.64	-30.9%	1.5%	$53.81	102.8%
17-2070	Electrical and Electronics Engineers	1,517	1.75	2.8%	-2.2%	$40.51	89.1%
17-2120	Marine Engineers and Naval Architects	439	19.96	19.5%	12.6%	$41.02	90.9%
17-2130	Materials Engineers	59	0.86	2.0%	-0.9%	$50.92	119.2%
17-2140	Mechanical Engineers	1,195	1.55	10.9%	2.6%	$39.96	99.2%
17-3010	Drafters	1,242	2.14	-3.4%	-10.6%	$24.69	97.1%
17-3020	Engineering Technicians, Except Drafters	2,924	2.42	7.2%	-1.4%	$31.23	115.4%
19-4030	Chemical Technicians	145	0.82	37.4%	2.7%	$21.73	100.6%
49-2090	Miscellaneous Electrical and Electronic Equipment Mechanics, Installers, and Repairers	952	1.40	-2.0%	-1.3%	$25.23	107.0%
51-1010	First-Line Supervisors of Production and Operating Workers	2,318	1.38	3.1%	-9.0%	$30.91	115.7%
51-2010	Aircraft Structure, Surfaces, Rigging, and Systems Assemblers	<10	0.08	NA	13.1%	NA	NA
51-2020	Electrical, Electronics, and Electromechanical Assemblers	399	0.54	-12.0%	-9.1%	$14.35	96.2%
51-2040	Structural Metal Fabricators and Fitters	329	1.51	-5.1%	-10.2%	$15.61	87.9%
51-2090	Miscellaneous Assemblers and Fabricators	2,493	0.63	-16.0%	-8.1%	$12.88	93.2%
51-4010	Computer Control Programmers and Operators	227	0.47	-5.6%	5.9%	$19.73	105.7%
51-4020	Forming Machine Setters, Operators, and Tenders, Metal and Plastic	109	0.32	-33.5%	-20.6%	$16.41	97.4%
51-4030	Machine Tool Cutting Setters, Operators, and Tenders, Metal and Plastic	239	0.26	-36.3%	-21.7%	$14.88	94.1%
51-4040	Machinists	1,335	1.22	8.8%	3.3%	$22.78	117.5%
51-4050	Metal Furnace Operators, Tenders, Pourers, and Casters	94	1.19	-15.6%	-17.6%	$19.76	105.3%
51-4060	Model Makers and Patternmakers, Metal and Plastic	13	0.49	-24.1%	-16.8%	$19.80	90.9%
51-4070	Molders and Molding Machine Setters, Operators, and Tenders, Metal and Plastic	316	0.84	-25.5%	-23.1%	$16.60	117.2%
51-4080	Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic	65	0.24	-24.2%	-9.7%	$9.61	58.2%
51-4110	Tool and Die Makers	192	0.93	-13.3%	-17.4%	$26.05	107.3%
51-4120	Welding, Soldering, and Brazing Workers	2,418	1.96	2.6%	-7.5%	$20.84	114.9%
51-4190	Miscellaneous Metal Workers and Plastic Workers	594	2.17	-8.2%	-21.3%	$21.12	126.1%
51-9010	Chemical Processing Machine Setters, Operators, and Tenders	141	0.46	10.9%	-0.9%	$21.16	97.1%
51-9030	Cutting Workers	100	0.46	-34.0%	-16.8%	$15.52	103.9%
51-9040	Extruding, Forming, Pressing, and Compacting Machine Setters, Operators/Tenders	93	0.50	-17.7%	-16.7%	$17.03	109.8%
51-9050	Furnace, Kiln, Oven, Drier, and Kettle Operators and Tenders	53	0.93	-21.3%	-19.0%	$19.02	110.5%
51-9060	Inspectors, Testers, Sorters, Samplers, and Weighers	1,041	0.75	-1.0%	-4.2%	$21.00	119.9%
51-9120	Painting Workers	537	1.17	1.8%	-8.6%	$20.54	122.0%
51-9140	Semiconductor Processors	<10	0.08	NA	-19.1%	NA	NA
51-9190	Miscellaneous Production Workers	1,750	0.74	-19.2%	-11.2%	$14.66	109.2%
Research and Development							
17-3030	Surveying and Mapping Technicians	184	1.23	-19.7%	-10.5%	$17.56	85.2%
19-2010	Astronomers and Physicists	188	3.51	31.8%	15.1%	$41.89	78.9%
19-2020	Atmospheric and Space Scientists	107	3.41	33.5%	18.5%	$41.37	98.9%
19-2030	Chemists and Materials Scientists	192	0.74	26.1%	4.8%	$35.64	98.3%
19-2040	Environmental Scientists and Geoscientists	308	0.83	16.0%	13.3%	$33.40	90.9%
19-2090	Miscellaneous Physical Scientists	154	2.04	21.0%	12.6%	$47.48	102.8%

Source: Economic Modeling Specialists Intl. (EMSI)

NA = Data Not Available

Food and Beverage, Workforce Trends 2006-2016

SOC	Description	2016 Jobs	2016 LQ	10-Year Jobs Change	U.S. 10-Year Jobs Change	Median Hourly Earnings	U.S. Ratio
Production							
11-3050	Industrial Production Managers	304	0.6	-9.6%	-8.2%	$49.29	110.1%
11-3070	Transportation, Storage, and Distribution Managers	270	0.9	6.8%	7.4%	$47.03	115.3%
13-1020	Buyers and Purchasing Agents	1,814	1.5	6.9%	1.1%	$31.38	110.6%
13-1080	Logisticians	929	2.6	17.1%	9.5%	$36.33	101.7%
17-2020	Agricultural Engineers	33	4.6	15.5%	11.4%	$29.86	87.4%
17-2040	Chemical Engineers	42	0.4	-13.9%	2.1%	$41.54	88.2%
17-2110	Industrial Engineers, Including Health and Safety	620	0.8	-3.1%	-2.3%	$41.32	103.8%
17-3020	Engineering Technicians, Except Drafters	2,924	2.4	7.2%	-1.4%	$31.23	115.4%
19-1010	Agricultural and Food Scientists	37	0.4	-1.8%	8.6%	$28.48	97.0%
19-2030	Chemists and Materials Scientists	192	0.7	26.1%	4.8%	$35.64	98.3%
19-4010	Agricultural and Food Science Technicians	15	0.2	-4.6%	9.7%	$17.77	105.4%
19-4030	Chemical Technicians	145	0.8	37.4%	2.7%	$21.73	100.6%
51-1010	First-Line Supervisors of Production and Operating Workers	2,318	1.4	3.1%	-9.0%	$30.91	115.7%
51-2090	Miscellaneous Assemblers and Fabricators	2,493	0.6	-16.0%	-8.1%	$12.88	93.2%
51-3010	Bakers	286	0.5	-5.6%	14.9%	$11.10	96.5%
51-3020	Butchers and Other Meat, Poultry, and Fish Processing Workers	747	0.7	1.9%	3.0%	$11.58	91.9%
51-3090	Miscellaneous Food Processing Workers	459	0.7	-4.9%	4.8%	$11.01	84.6%
51-4010	Computer Control Programmers and Operators	227	0.5	-5.6%	5.9%	$19.73	105.7%
51-4020	Forming Machine Setters, Operators, and Tenders, Metal and Plastic	109	0.3	-33.5%	-20.6%	$16.41	97.4%
51-4030	Machine Tool Cutting Setters, Operators, and Tenders, Metal and Plastic	239	0.3	-36.3%	-21.7%	$14.88	94.1%
51-4060	Model Makers and Patternmakers, Metal and Plastic	13	0.5	-24.1%	-16.8%	$19.80	90.9%
51-4070	Molders and Molding Machine Setters, Operators, and Tenders, Metal and Plastic	316	0.8	-25.5%	-23.1%	$16.60	117.2%
51-4080	Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic	65	0.2	-24.2%	-9.7%	$9.61	58.2%
51-4190	Miscellaneous Metal Workers and Plastic Workers	594	2.2	-8.2%	-21.3%	$21.12	126.1%
51-9020	Crushing, Grinding, Polishing, Mixing, and Blending Workers	529	1.0	9.7%	-8.7%	$15.92	98.9%
51-9040	Extruding, Forming, Pressing/Compacting Machine Setters, Operators/Tenders	93	0.5	-17.7%	-16.7%	$17.03	109.8%
51-9060	Inspectors, Testers, Sorters, Samplers, and Weighers	1,041	0.8	-1.0%	-4.2%	$21.00	119.9%
51-9110	Packaging and Filling Machine Operators and Tenders	754	0.7	3.6%	0.5%	$14.99	116.0%
Distribution							
53-1020	First-Line Supervisors of Helpers, Laborers, and Material Movers, Hand	356	0.7	-5.4%	3.9%	$22.43	99.6%
53-1030	First-Line Supervisors of Transp./Material-Moving Machine/Vehicle Operators	582	1.0	-5.2%	3.5%	$28.37	107.0%
53-3030	Driver/Sales Workers and Truck Drivers	6,809	0.8	-5.7%	2.0%	$14.86	89.3%
53-4010	Locomotive Engineers and Operators	134	1.1	12.8%	-5.3%	$26.73	101.5%
53-4020	Railroad Brake, Signal, and Switch Operators	63	1.1	14.5%	-2.5%	$27.25	108.2%
53-4030	Railroad Conductors and Yardmasters	131	1.1	14.0%	-5.2%	$27.12	103.4%
53-4090	Miscellaneous Rail Transportation Workers	<10	0.7	NA	3.9%	NA	NA
53-5010	Sailors and Marine Oilers	626	8.4	-13.5%	-0.5%	$19.30	103.7%
53-5020	Ship and Boat Captains and Operators	529	5.2	-16.4%	0.8%	$33.50	99.7%
53-7010	Conveyor Operators and Tenders	40	0.4	-16.5%	-0.9%	$14.81	95.4%
53-7020	Crane and Tower Operators	355	2.9	-2.2%	-4.1%	$26.90	106.1%
53-7040	Hoist and Winch Operators	<10	1.1	NA	-3.6%	NA	NA
53-7050	Industrial Truck and Tractor Operators	1,145	0.8	-13.0%	2.1%	$16.52	107.4%
53-7060	Laborers and Material Movers, Hand	7,399	0.7	-2.9%	3.0%	$11.29	97.3%
53-7120	Tank Car, Truck, and Ship Loaders	25	0.7	-39.9%	8.1%	$18.25	90.8%

Source: Economic Modeling Specialists Intl. (EMSI)

NA = Data Not Available

Professional and Technical Services, Workforce Trends 2006-2016

SOC	Description	2016 Jobs	2016 LQ	10-Year Jobs Change	U.S. 10-Year Jobs Change	Median Hourly Earnings	U.S. Ratio
11-1010	Chief Executives	499	0.60	-4.0%	-0.6%	$78.79	106.5%
11-1020	General and Operations Managers	4,617	0.78	1.5%	5.7%	$50.98	106.7%
11-3010	Administrative Services Managers	414	0.53	3.4%	9.8%	$38.56	94.8%
11-3020	Computer and Information Systems Managers	700	0.71	4.3%	20.2%	$61.73	100.7%
11-3030	Financial Managers	880	0.58	3.3%	3.7%	$53.75	96.4%
11-3050	Industrial Production Managers	304	0.65	-9.6%	-8.2%	$49.29	110.1%
11-3060	Purchasing Managers	198	0.99	5.8%	2.0%	$54.04	106.3%
11-3110	Compensation and Benefits Managers	24	0.55	6.7%	6.2%	$48.15	90.0%
11-3120	Human Resources Managers	255	0.70	11.1%	13.4%	$45.64	94.1%
13-1030	Claims Adjusters, Appraisers, Examiners, and Investigators	697	0.85	16.0%	4.4%	$27.07	91.1%
13-1040	Compliance Officers	943	1.34	19.4%	7.3%	$30.03	94.7%
13-1050	Cost Estimators	1,014	1.59	-11.6%	-10.1%	$27.85	96.4%
13-1070	Human Resources Workers	1,826	1.17	8.2%	5.8%	$28.07	100.6%
13-1110	Management Analysts	2,982	1.39	17.2%	16.1%	$39.31	104.9%
13-1140	Compensation, Benefits, and Job Analysis Specialists	199	0.87	5.7%	0.8%	$26.36	90.0%
13-1150	Training and Development Specialists	865	1.25	13.4%	12.0%	$29.58	105.5%
13-1190	Miscellaneous Business Operations Specialists	4,013	1.49	14.7%	9.4%	$34.64	105.5%
13-2010	Accountants and Auditors	3,404	0.89	10.4%	10.5%	$30.33	95.5%
13-2030	Budget Analysts	293	1.81	16.0%	6.5%	$34.78	100.3%
13-2060	Financial Examiners	97	0.91	28.3%	7.4%	$34.42	89.0%
13-2080	Tax Examiners, Collectors and Preparers, and Revenue Agents	502	1.08	16.9%	7.1%	$18.94	86.1%
13-2090	Miscellaneous Financial Specialists	630	1.58	16.2%	5.9%	$32.99	103.9%
15-1110	Computer and Information Research Scientists	173	2.32	19.2%	23.6%	$49.55	96.3%
15-1120	Computer and Information Analysts	1,406	0.76	7.0%	26.3%	$39.13	97.4%
15-1130	Software Developers and Programmers	2,705	0.59	-6.6%	22.9%	$42.27	96.9%
15-1140	Database and Systems Administrators and Network Architects	1,486	0.83	-1.7%	8.9%	$38.39	96.7%
15-1150	Computer Support Specialists	1,768	0.76	-4.7%	15.1%	$23.69	95.1%
15-1190	Miscellaneous Computer Occupations	1,395	2.16	17.2%	10.3%	$41.74	104.2%
15-2020	Mathematicians	14	1.33	NA	29.8%	$51.46	107.8%
15-2030	Operations Research Analysts	249	0.93	25.3%	32.0%	$44.39	118.3%
15-2040	Statisticians	69	0.80	53.8%	42.1%	$32.76	84.2%
17-1010	Architects, Except Naval	276	0.71	-26.7%	-9.6%	$31.35	94.7%
17-1020	Surveyors, Cartographers, and Photogrammetrists	146	0.93	-17.4%	-3.9%	$27.75	98.8%
17-2010	Aerospace Engineers	602	3.12	25.4%	3.7%	$55.64	107.9%
17-2020	Agricultural Engineers	33	4.60	15.5%	11.4%	$29.86	87.4%
17-2050	Civil Engineers	846	1.09	-6.0%	3.5%	$35.97	90.7%
17-2060	Computer Hardware Engineers	142	0.64	-30.9%	1.5%	$53.81	102.8%
17-2070	Electrical and Electronics Engineers	1,517	1.75	2.8%	-2.2%	$40.51	89.1%
17-2080	Environmental Engineers	230	1.52	10.5%	14.6%	$40.62	101.0%
17-2120	Marine Engineers and Naval Architects	439	19.96	19.5%	12.6%	$41.02	90.9%
17-2140	Mechanical Engineers	1,195	1.55	10.9%	2.6%	$39.96	99.2%
17-2150	Mining and Geological Engineers, Including Mining Safety Engineers	30	1.41	4.1%	2.3%	$45.84	104.1%
17-2190	Miscellaneous Engineers	860	2.19	15.4%	5.3%	$48.04	106.6%
17-3010	Drafters	1,242	2.14	-3.4%	-10.6%	$24.69	97.1%
17-3020	Engineering Technicians, Except Drafters	2,924	2.42	7.2%	-1.4%	$31.23	115.4%
17-3030	Surveying and Mapping Technicians	184	1.23	-19.7%	-10.5%	$17.56	85.2%
19-3040	Sociologists	<10	0.33	NA	3.2%	NA	NA
19-3050	Urban and Regional Planners	122	1.24	4.9%	3.6%	$29.51	90.6%
19-3090	Miscellaneous Social Scientists and Related Workers	395	2.57	23.1%	11.4%	$39.35	104.9%
19-4060	Social Science Research Assistants	85	1.03	42.3%	10.7%	$17.83	90.9%
19-4090	Miscellaneous Life, Physical, and Social Science Technicians	564	1.36	20.4%	11.4%	$24.24	113.7%
43-1010	First-Line Supervisors of Office and Administrative Support Workers	4,055	1.00	4.1%	5.8%	$22.77	92.7%
43-3010	Bill and Account Collectors	909	0.94	5.4%	-5.6%	$14.07	86.3%
43-3020	Billing and Posting Clerks	1,074	0.74	14.5%	13.4%	$14.91	89.0%

Source: Economic Modeling Specialists Intl. (EMSI)

NA = Data Not Available

Professional and Technical Services, Workforce Trends 2006-2016 Cont.

SOC	Description	2016 Jobs	2016 LQ	10-Year Jobs Change	U.S. 10-Year Jobs Change	Median Hourly Earnings	U.S. Ratio
Cont.							
43-3030	Bookkeeping, Accounting, and Auditing Clerks	4,175	0.87	-9.9%	-6.4%	$16.32	92.1%
43-3050	Payroll and Timekeeping Clerks	364	0.75	-4.7%	-0.9%	$18.54	95.7%
43-3060	Procurement Clerks	354	1.74	6.0%	1.0%	$19.38	101.1%
43-4010	Brokerage Clerks	42	0.26	-6.9%	-6.0%	$20.37	87.3%
43-4020	Correspondence Clerks	17	0.84	-7.3%	-18.9%	$13.55	79.2%
43-4040	Credit Authorizers, Checkers, and Clerks	51	0.41	-23.2%	-11.1%	$13.14	78.1%
43-4050	Customer Service Representatives	5,321	0.74	-5.9%	7.0%	$13.75	89.9%
43-4060	Eligibility Interviewers, Government Programs	553	1.60	18.0%	2.3%	$17.65	88.1%
43-4110	Interviewers, Except Eligibility and Loan	413	0.68	32.2%	12.4%	$13.02	85.0%
43-4140	New Accounts Clerks	100	0.74	-13.7%	-12.8%	$16.05	97.0%
43-4160	Human Resources Assistants, Except Payroll and Timekeeping	518	1.29	4.1%	2.0%	$17.30	93.2%
43-4170	Receptionists and Information Clerks	3,135	1.07	12.0%	9.4%	$12.24	93.5%
43-4190	Miscellaneous Information and Record Clerks	1,509	2.74	19.2%	10.4%	$17.28	94.4%
43-5020	Couriers and Messengers	173	0.64	-7.3%	-3.8%	$14.14	105.1%
43-6010	Secretaries and Administrative Assistants	6,788	0.60	-4.2%	2.8%	$16.61	92.1%
43-9010	Computer Operators	86	0.51	-20.3%	-12.5%	$17.96	92.1%
43-9020	Data Entry and Information Processing Workers	488	0.55	-10.4%	-7.4%	$14.66	95.2%
43-9030	Desktop Publishers	15	0.40	-28.0%	-22.8%	$19.35	93.9%
43-9040	Insurance Claims and Policy Processing Clerks	223	0.31	-1.5%	4.8%	$14.10	78.6%
43-9060	Office Clerks, General	8,556	0.94	-2.5%	2.2%	$13.36	95.3%
43-9070	Office Machine Operators, Except Computer	98	0.53	-9.6%	-11.8%	$10.28	74.0%
43-9080	Proofreaders and Copy Markers	13	0.38	-21.8%	-5.7%	$15.12	86.5%
43-9110	Statistical Assistants	10	0.27	NA	-4.4%	NA	NA
43-9190	Miscellaneous Office and Administrative Support Workers	921	0.99	5.4%	9.4%	$17.97	111.9%

Source: Economic Modeling Specialists Intl. (EMSI)

NA = Data Not Available

Tourism, Workforce Trends 2006-2016

SOC	Description	2016 Jobs	2016 LQ	10-Year Jobs Change	U.S. 10-Year Jobs Change	Median Hourly Earnings	U.S. Ratio
11-1020	General and Operations Managers	4,617	0.78	1.5%	5.7%	$50.98	106.7%
11-9050	Food Service Managers	512	0.65	-6.9%	5.1%	$23.88	120.5%
11-9080	Lodging Managers	68	0.60	-43.0%	-15.6%	$27.52	127.7%
13-1120	Meeting, Convention, and Event Planners	271	1.02	15.0%	26.7%	$20.61	91.2%
19-1030	Conservation Scientists and Foresters	141	1.67	21.1%	2.3%	$30.69	103.9%
19-3090	Miscellaneous Social Scientists and Related Workers	395	2.57	23.1%	11.4%	$39.35	104.9%
25-4010	Archivists, Curators, and Museum Technicians	220	2.96	2.8%	16.4%	$20.91	88.5%
27-1010	Artists and Related Workers	384	0.71	3.5%	-3.1%	$14.58	71.5%
27-1020	Designers	973	0.58	-14.3%	-4.7%	$17.51	86.9%
27-2010	Actors, Producers, and Directors	197	0.36	9.7%	9.5%	$20.73	73.2%
27-2020	Athletes, Coaches, Umpires, and Related Workers	641	0.79	3.4%	16.4%	$12.86	81.6%
27-2030	Dancers and Choreographers	46	0.69	16.3%	10.6%	$16.65	94.4%
27-2040	Musicians, Singers, and Related Workers	712	1.03	6.8%	6.8%	$13.99	66.7%
27-2090	Miscellaneous Entertainers and Performers, Sports and Related Workers	136	1.32	26.2%	8.9%	$9.83	57.3%
35-1010	Supervisors of Food Preparation and Serving Workers	3,272	1.12	11.2%	20.0%	$15.74	104.6%
35-2010	Cooks	5,713	0.88	9.9%	15.8%	$10.65	100.0%
35-2020	Food Preparation Workers	2,373	0.96	9.3%	16.5%	$9.66	98.2%
35-3010	Bartenders	1,152	0.69	13.6%	15.2%	$13.77	140.9%
35-3020	Fast Food and Counter Workers	13,141	1.26	11.3%	22.3%	$8.79	97.1%
35-3030	Waiters and Waitresses	6,935	0.99	7.5%	16.7%	$10.37	110.7%
35-3040	Food Servers, Nonrestaurant	846	1.19	23.6%	14.9%	$8.88	86.8%
35-9010	Dining Room and Cafeteria Attendants and Bartender Helpers	1,394	1.17	4.3%	18.7%	$9.12	97.1%
35-9020	Dishwashers	1,575	1.11	2.5%	11.1%	$8.71	92.8%
35-9030	Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop	1,414	1.32	9.3%	19.0%	$8.63	91.9%
35-9090	Miscellaneous Food Preparation and Serving Related Workers	80	0.58	2.3%	15.9%	$9.59	91.1%
37-1010	First-Line Supervisors of Building and Grounds Cleaning and Maintenance Workers	941	0.95	-7.0%	2.3%	$15.35	88.1%
37-2010	Building Cleaning Workers	9,613	0.85	-5.4%	9.1%	$9.39	85.5%
37-3010	Grounds Maintenance Workers	3,561	0.93	6.3%	10.2%	$10.86	90.9%
39-1020	First-Line Supervisors of Personal Service Workers	619	1.13	11.5%	5.3%	$15.21	92.6%
39-3020	Motion Picture Projectionists	32	1.82	-16.3%	-9.6%	$8.71	82.4%
39-3030	Ushers, Lobby Attendants, and Ticket Takers	584	1.69	5.3%	16.5%	$8.43	88.2%
39-3090	Miscellaneous Entertainment Attendants and Related Workers	1,465	1.54	19.4%	14.1%	$8.40	84.4%
39-5010	Barbers, Hairdressers, Hairstylists and Cosmetologists	2,413	1.16	27.1%	12.7%	$11.80	106.4%
39-5090	Miscellaneous Personal Appearance Workers	531	0.90	30.7%	24.3%	$10.60	95.5%
39-6010	Baggage Porters, Bellhops, and Concierges	202	0.93	-3.2%	14.2%	$10.68	85.1%
39-7010	Tour and Travel Guides	403	2.92	0.3%	16.5%	$11.17	83.7%
41-3040	Travel Agents	111	0.53	-37.7%	-15.6%	$17.09	104.5%
43-4080	Hotel, Motel, and Resort Desk Clerks	824	1.23	-26.1%	7.3%	$9.04	86.2%
43-4170	Receptionists and Information Clerks	3,135	1.07	12.0%	9.4%	$12.24	93.5%
43-4180	Reservation and Transportation Ticket Agents and Travel Clerks	619	1.55	42.1%	-0.9%	$12.63	76.6%
49-9070	Maintenance and Repair Workers, General	3,803	0.96	-2.9%	5.2%	$16.49	93.4%
53-3020	Bus Drivers	1,543	0.87	0.0%	7.5%	$14.15	91.9%
53-3040	Taxi Drivers and Chauffeurs	652	0.86	15.3%	25.4%	$11.68	106.6%

Source: Economic Modeling Specialists Intl. (EMSI)

Defense, Workforce Trends 2006-2016

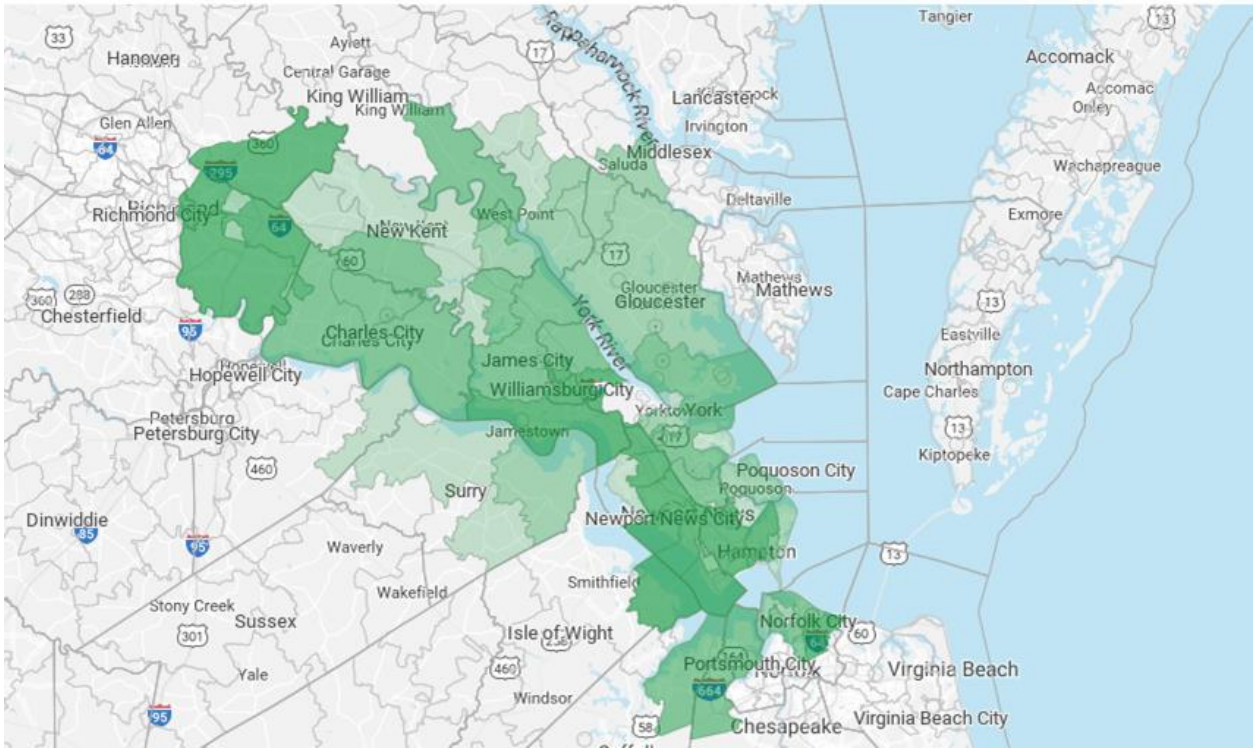
SOC	Description	2016 Jobs	2016 LQ	10-Year Jobs Change	U.S. 10-Year Jobs Change	Median Hourly Earnings	U.S. Ratio
11-3020	Computer and Information Systems Managers	700	0.71	4.3%	20.2%	$61.73	100.7%
11-3070	Transportation, Storage, and Distribution Managers	270	0.86	6.8%	7.4%	$47.03	115.3%
13-1080	Logisticians	929	2.57	17.1%	9.5%	$36.33	101.7%
15-1110	Computer and Information Research Scientists	173	2.32	19.2%	23.6%	$49.55	96.3%
15-1120	Computer and Information Analysts	1,406	0.76	7.0%	26.3%	$39.13	97.4%
15-1130	Software Developers and Programmers	2,705	0.59	-6.6%	22.9%	$42.27	96.9%
15-1140	Database and Systems Administrators and Network Architects	1,486	0.83	-1.7%	8.9%	$38.39	96.7%
15-1150	Computer Support Specialists	1,768	0.76	-4.7%	15.1%	$23.69	95.1%
15-1190	Miscellaneous Computer Occupations	1,395	2.16	17.2%	10.3%	$41.74	104.2%
17-1010	Architects, Except Naval	276	0.71	-26.7%	-9.6%	$31.35	94.7%
17-1020	Surveyors, Cartographers, and Photogrammetrists	146	0.93	-17.4%	-3.9%	$27.75	98.8%
17-2010	Aerospace Engineers	602	3.12	25.4%	3.7%	$55.64	107.9%
17-2060	Computer Hardware Engineers	142	0.64	-30.9%	1.5%	$53.81	102.8%
17-2070	Electrical and Electronics Engineers	1,517	1.75	2.8%	-2.2%	$40.51	89.1%
17-2120	Marine Engineers and Naval Architects	439	19.96	19.5%	12.6%	$41.02	90.9%
17-2130	Materials Engineers	59	0.86	2.0%	-0.9%	$50.92	119.2%
17-2140	Mechanical Engineers	1,195	1.55	10.9%	2.6%	$39.96	99.2%
17-2160	Nuclear Engineers	897	17.84	20.7%	4.2%	$38.37	80.0%
17-3010	Drafters	1,242	2.14	-3.4%	-10.6%	$24.69	97.1%
17-3020	Engineering Technicians, Except Drafters	2,924	2.42	7.2%	-1.4%	$31.23	115.4%
17-3030	Surveying and Mapping Technicians	184	1.23	-19.7%	-10.5%	$17.56	85.2%
19-2020	Atmospheric and Space Scientists	107	3.41	33.5%	18.5%	$41.37	98.9%
19-4050	Nuclear Technicians	41	2.36	8.2%	3.4%	$29.17	80.6%
43-9010	Computer Operators	86	0.51	-20.3%	-12.5%	$17.96	92.1%
43-9020	Data Entry and Information Processing Workers	488	0.55	-10.4%	-7.4%	$14.66	95.2%
43-9030	Desktop Publishers	15	0.40	-28.0%	-22.8%	$19.35	93.9%
55-9990	Military occupations	33,316	5.90	-16.8%	2.9%	$17.22	101.8%
13-1110	Management Analysts	2,982	1.39	17.2%	16.1%	$39.31	104.9%
13-1190	Miscellaneous Business Operations Specialists	4,013	1.49	14.7%	9.4%	$34.64	105.5%
15-1130	Software Developers and Programmers	2,705	0.59	-6.6%	22.9%	$42.27	96.9%
17-2050	Civil Engineers	846	1.09	-6.0%	3.5%	$35.97	90.7%
43-9060	Office Clerks, General	8,556	0.94	-2.5%	2.2%	$13.36	95.3%
47-2230	Solar Photovoltaic Installers	20	1.12	-6.9%	0.4%	$18.83	95.6%
49-9080	Wind Turbine Service Technicians	<10	0.43	NA	73.9%	NA	NA

Source: Economic Modeling Specialists Intl. (EMSI)

NA = Data Not Available

Appendix B: Occupational Trends Map

For occupational trends, *Market Street* utilized a drive time analysis capturing all zip codes within a 50 minute commute time of the Greater Williamsburg region. The following map displays the boundaries of the labor shed used for the occupational analysis.



Source: Economic Modeling Specialists Intl. (EMSI)

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2035 Strategic Plan

A Guidebook for Investing in the County's Future

James City County
Virginia
Jamestown 1607

jamescitycountyva.gov

James City County, Virginia
Adopted November 22, 2016

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Kevin Onizuk, Member, Jamestown District
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1. Description of Short-Term Projects and Initiatives
2. List of Medium- and Long-Term Actions for Future Implementation
3. Estimates of Fiscal Implications

What is a strategic plan?

For a local government, a strategic plan:

1. Sets the focus for the community;
2. Defines the County's actions and investments; and
3. Directs the achievement of short-term and long-term goals.

James City County

About Our Strategic Plan

James City County's 2035 Strategic Plan is the County's guidebook for future investments, the provision of public services and facilities and County work plans for the next 20 years. This plan sets out priorities to be incorporated into future County budgets and Capital Improvement Plans (CIP), as well as new initiatives undertaken by County departments.

James City County in 2035 - Our Vision

This plan was predicated on achieving the County vision set out in our newest Comprehensive Plan - *Toward 2035: Leading the Way*.

"...We will sustain the quality of life and economic vitality in James City County while preserving our special natural and cultural heritage. We will accomplish this by promoting smart growth principles, adopting supporting strategies, providing a variety of housing options, supporting economic development, and providing diverse recreational, cultural, and education opportunities for all ages. These actions will be implemented to the benefit of all County residents. James City County will uphold its identity as an exceptional area to visit and a special place to live and work."

- Excerpt from Vision Statement in Toward 2035: Leading the Way

Why does JCC need this plan? It has a lot of plans already!

James City County (JCC) has no shortage of great ideas to implement. The list below illustrates the volumes of great planning work that the County has undertaken in the last two decades. What JCC needs is a guide that identifies the community's priorities for implementation, and a strategy for executing the actions. That is the purpose of this plan.

JCC's Plans, Policies and Studies

Board of Supervisors Adopted Policies
Greater Williamsburg Target Sector Analysis (2016)
FY2016 Adopted Operating Budget & Capital Improvement Plan (2016)
Williamsburg-James City County Public Schools Report of Facilities Condition and Educational Adequacy Assessment (2016)
James City County Housing Study (2016)
Greater Williamsburg 2014 Affordability Survey Results (2015)
Greater Williamsburg 2015 Brand Health Survey (2015)
James City County Credit Rating Presentation (2015)
Regulations Governing Utility Services (2015)
Toward 2035: Leading the Way, James City County Comprehensive Plan (2015)
Water Supply Study Final Draft Report (2015)
James City County Parks and Recreation Advisory Commission Senior Services Meeting (2015)
FY2016 Budget: County Administrator's Message (2015)
Economic Diversification in America's Historic Triangle: Progress and Next Steps (2015)
James City County Energy Use Report (2014)
James City County 2014 Planning Commission Annual Report (2014)
2014 Annual Lodging Report (2014)
James City County Sports Facilities Five-Year Operating Pro Forma (2014)
Longhill Road Corridor Study (2014)
Greater Williamsburg 2014 Tourism Strategy Brief (2014)
James City County Citizens Survey (2014)
Historic Triangle Coordinated Comprehensive Plan Review Final Summary Report (2014)
2013 Virginia Outdoors Plan (2013)
Williamsburg Area Visitor Research (2013)
2013 Williamsburg Post-Advertising Tracking Survey Results (2013)
Williamsburg - James City County Public Schools Five-Year Strategic Plan (2013)
Regional Bicycle Facility Plan (2013)
Williamsburg Regional Library Strategic Plan (2012)
Virginia's Golden Crescent Summit (2012)
James City County/Williamsburg/York County Comprehensive Transportation Study (2012)
James City County Tourism Zone (2012)
Board of Supervisors Adopted Policies (2012)
2011 Virgina Outdoors Demand Survey (2011)
James City County 2011 Pedestrian Accommodation Master Plan (2011)
James City County Enterprise Zone: Policies and Procedures for Requesting Local Enterprise Zone Incentives (2011)
James City County Parks & Recreation Economic Impact Study (2010)
Shaping Our Shores: Master Plan for Jamestown Beach Campground, Jamestown Yacht Basin & Chickahominy Riverfront Park (2009)
James City County Division of Parks and Recreation Master Plan Update (2008)
Business Climate Task Force Report (2008)
Housing Needs Assessment James City County and Williamsburg, Virginia (2007)
James City Community Profile (2007)
Better Site Design in James City County: Report and Findings from the Better Site Design Implementation Committee (2007)
Greenway Master Plan (2002)
James City County Strategic Plan for Children and Youth (2001)
James City County Chesapeake Bay Preservation Ordinance (1990)
Chesapeake Bay Preservation Act (1988)

What types of actions will the County take to implement the vision?

The County can take direct action through:

- Capital investments
- Public services
- County Programs

County leaders can also take indirect action to:

- Address legislative issues.
- Partner with other public agencies such as WJCC Schools.
- Work with community organizations and other governing bodies.

Achieving Our Vision - Challenges and Opportunities

This planning process provided an opportunity to sit back and consider the key opportunities and challenges JCC faces in achieving our vision, with particular emphasis on fiscal and economic implications.

Capitalizing on the County's Talented Workforce and Educational System
High educational attainment of JCC's residents and workers is an asset to the community. It means part of the County's economic strategy should support jobs that fit this specialized workforce and the importance of continuing to provide a high quality public education.

Responding to Generational Change
Shifting demographics of JCC's population will impact the types of different services that need to be provided to its citizens in the future, particularly those age 65 and up.

Expanding Economic Opportunities Through Regional Collaboration
The Greater Williamsburg region must maintain its distinct reputation as a destination for travelers and tourists while diversifying economic opportunities to create a more sustainable regional economy, including jobs for emerging young professionals. The challenge is to support economic development efforts to achieve these objectives through creating an environment for private investment and job creation that also maintains and enhances the County's unique community character.

Addressing Population Changes that Impact the County's Budget
As the population continues to grow and change, the County must provide new public services and facilities needed while maintaining existing infrastructure. Preparing the County for future public investments, such as a new long-term water source, are paramount.

Achieving a Fiscal Balance
Debt can be expensive, with public revenues spent on paying off past expenditures. JCC has taken aggressive steps to reduce outstanding debt so that it does not impact the County's ability to provide quality services in the future. Continuing to look forward to future funding needs, while also focusing on short-term budget planning is needed.

Developing the Plan

James City County's project leadership (Board of Supervisors, Strategic Planning Advisory Group, Technical Advisory Group and Staff Project Team) undertook a 14-month planning effort to identify the County's top priorities for action and investment over the next 20 years to set the course for a prosperous future. The objectives of the 2035 Strategic Planning process were to:

- Develop a method and approach to prioritize the County's established policy direction and actions in light of overarching community values, economic opportunities and fiscal considerations.
- Refine the County's policy direction to establish short-, medium- and long-term priorities for action.
- Identify appropriate roles and investments for the County and outside partners to implement the short-, medium- and long-term priorities.
- Develop a comprehensive and succinct 2035 Strategic Plan that will guide County operations and management over time.

This plan was developed directly from the input provided from James City County residents. The Strategic Plan Advisory Group and participating stakeholders were connected throughout the process, and spent numerous hours reviewing project reports, providing feedback on plan ideas, and serving as noble ambassadors to the planning efforts through volunteering and other assistance at public open houses. Their support and commitment is to be commended!

Citizens played a direct role in guiding the priorities included in this plan. At four public open houses and through online communications through the project website, citizens provided direct input on all the goals and actions set out in this plan.

Strategic planning by the numbers

A significant amount of time, County resources and volunteer hours were spent to develop this plan. This planning effort was a direct investment in JCC to create a framework for prioritizing future efforts and actions.

58
hours of public workshops and project team meetings

500
people participating in workshops and online activities

10
draft reports

185
people signed up for project updates on project website

5,432
miles driven by consultant to project meetings

30
hours on project conference calls

0
meetings missed by Board of Supervisor members

How will this plan be used?

James City County will use this plan to:

1. Focus its organizational efforts and resources at all levels.

2. Set priorities for staff work plans.

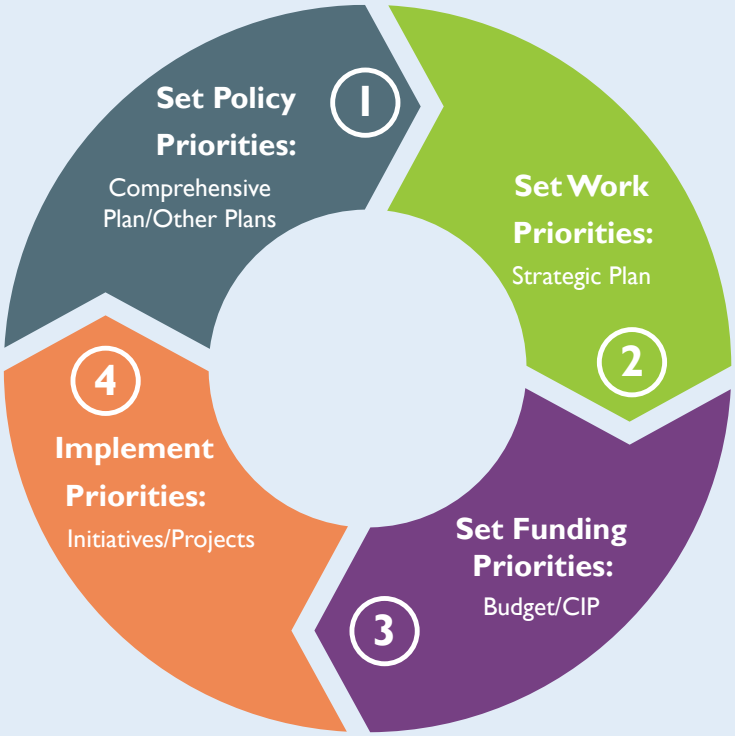
3. Evaluate progress toward achieving the vision.

4. Assess/adjust the organization's direction in response to a changing environment.

Investing in Our Future: The Strategic Plan in Action

This plan will work in tandem with existing policy documents, and the County's budget and CIP to inform decisions on community investments and improvements. First, this plan was developed to reinforce the policy direction set out in other JCC plans, most importantly the Comprehensive Plan. Second, the goals and actions included in this plan set out the capital projects for FY2022-26 and operational initiatives for FY2017-22. These projects and initiatives will be used to set funding priorities in future budget and capital improvement plans, which will lead to direct implementation of this plans actions. Over time, these actions will become a natural cycle of decision-making steps that the County's leaders will use to develop plans for investing in JCC's future. And medium- and long-term projects identified in an appendix to this plan will be used to identify future short-term projects and initiatives.

Process for County Decision-Making on Resource Allocation



Framework for Implementation

Our role as a County government to support and advance our community vision will be to:

INVEST in the capital facilities and infrastructure we need to be successful.

PROTECT people so they feel secure in their every day lives, and to protect the community's character.

SERVE people so that they can live full and healthy lives.

COLLABORATE with regional public, non-profit and private business partners to improve our community.

MANAGE all of these things in a fiscally responsible manner.

INVEST	PROTECT	SERVE	COLLABORATE
CAPITAL FACILITIES, INFRASTRUCTURE AND ECONOMIC INITIATIVES	*LIVES AND COMMUNITY CHARACTER*	*PEOPLE*	*PARTNERSHIPS*
Long-term Water Public Schools Transportation Stormwater Systems Government Facilities Other Public Infrastructure	Public Safety Built Environment Natural Environment	Parks and Recreation Social Services Housing and Neighborhoods Public Safety	Economic Development Workforce Development Education Human Services Programs for the Vulnerable and Underserved Programs for Seniors Programs for Youth

MANAGE

CAPITAL IMPROVEMENT PLAN *COUNTY BUDGET* *FISCAL HEALTH*

This All Sounds Great, But How Will This Really Work?

Each year, the County undertakes an important process to set its budget and capital improvement plan for subsequent years. The following steps outline how the County will use this Strategic Plan to inform development of the JCC Capital Improvement Plan that sets out future investments for the County.

Step 1

Departmental CIP Requests

At the beginning of the Capital Improvement Plan (CIP) process, each JCC department submits a list of capital projects to be reviewed for inclusion in the CIP. The Strategic Plan acts as an inventory of projects, and each responsible department will use the inventory to generate the requests.

Step 2

Administrative Review of Requests

Once the departments have submitted their requests, the County Administrator and County Financial and Management Services Director will review the requests to ensure they are consistent with the Strategic Plan and current capital needs. County Administration will check for adequate substantiation of projects not included within the Strategic Plan.

Step 3

Planning Commission Prioritization

Once vetted by County Administration, the list of requests are forwarded to the County Planning Commission for review. Using a set list of criteria that addresses both the Comprehensive and the Strategic Plans, the Planning Commission will prioritize the departmental and WJCC School Board CIP requests.

WJCC School Board CIP Requests

Step 4

BOS Confirmation of CIP

Based on available funding, the County Administrator will propose a CIP budget that includes Planning Commission priorities for the Board of Supervisors to review and approve.

Why is this plan so important?

The Strategic Plan plays a critical role to:

- Inform decisions on capital investments and operational initiatives.
- Form the development of the County's annual budget and Capital Improvement Plan (CIP).

Our Plan Goals and Future Actions

At the start of this planning process, project leaders continually asked...
"What are we trying to achieve?" For months, the SPAG, TAG and Board of Supervisors diligently worked to develop a set of seven goals that will set us on a path to realizing our community vision:

- Sustainable Long-Term Water Supply
- Modern Infrastructure, Facilities and Technology Systems
- Expanding and Diversifying Local Economy
- Protected Community Character and an Enhanced Built Environment
- Exceptional Public Services
- High Quality Education
- Fiscally Efficient Government

Future actions to achieve these goals are organized as either capital projects or operational initiatives. For each project and initiative, a mid-year 2016 cost estimate is provided in Appendix 3 to give some sense of the expected revenues needed to undertake each action. Moving forward, costs are expected to change, and will ultimately be finalized as part of the annual budget and CIP process.

What we learned...

At the March 2016 public open houses, citizens:

1. Supported the seven goals.

2. Supported investments in public education and library programming.

3. Were reluctant to support the County taking a direct role in "lifelong learning" opportunities.

What timeframe does this Strategic Plan focus on?

This plan is long-range as it addresses expected capital needs for the next 20 years. In the short-term it sets investment priorities for 5 years beyond the current 6-year Capital Improvement Plan.

The plan sets out the County's likely investments over the next 20 years, and how best to use resources short-term. It links the timeframes of the current CIP process with longer-term planning needs.

Timeframes for Capital Projects

FY2017-21: In Current JCC CIP
July 2021-December 2026: Short-Term **(focus timeframe for this plan)**
2027-31: Medium-Term Focus (see appendix)
2032-35: Long-Term Focus (see appendix)

Timeframes for Operational Initiatives

FY2017-22 **(focus timeframe for this plan)**

Estimated Costs

Cost estimates for projects and initiatives are included in Appendix 3. Estimates are based on 2016 costs and do not reflect funding changes that may have occurred since the financial analysis was completed.

Goal 1: Sustainable Long-Term Water Supply

James City County will provide an adequate, potable, long-term water supply that is financially sustainable for the County's current and future residents and businesses.

INVEST

COLLABORATE

MANAGE

What Are We Trying to Achieve?

Meet our long-term water supply needs in a sustainable manner.

Operational Initiatives

- Update JCSA Asset Management Plan (Capital Replacement Plan).
- Update JCSA Regulations.
- Develop Water Conservation Plan for Residences and Businesses.
- Evaluate Alternatives for Long-Term Water Supply.

INVEST

SERVE

COLLABORATE

MANAGE

What Are We Trying to Achieve?

Modernize infrastructure and enhance technology to support targeted economic development efforts and enhance quality of life for the citizens of James City County.

Goal 2: Modern Infrastructure, Facilities, and Technology Systems

The County will undertake strategic investments to modernize infrastructure, community facilities, public education and technology to enhance the quality of life provided to its residents, address the changing needs of its aging population and improve the prospects for growing and new businesses. These investments will be funded using sustainable approaches that will maintain the fiscal health of the County.

Capital Projects

- Construct Skiffes Creek Connector.
- Widen Croaker Road– Phase 1.
- Implement Stormwater CIP Projects.
- Replace JCSA Meters at Residences (ongoing).

Operational Initiatives

- Develop a Plan for a Multi-Use Venue for Arts, Sports, Education.
- Develop a Long Range Facilities Plan in Coordination with WJCC Schools.
- Conduct a Study of County Office Space Needs.
- Develop Enterprise Architecture Plan (Technology Plan).
- Develop a Plan to Reclaim Hospital Area at the JCCRC for Program Space for Users.
- Plan for Land Needs (future schools and JCC facilities).
- Update Master Transportation Plan and Prioritization of Road Projects.
- Continue to Develop Watershed Management Plans for the Remaining County Watersheds.

Goal 3: Expanding and Diversifying Local Economy

James City County will support the expansion and diversification of the local economy by providing the regulatory framework to support business development, by undertaking economic development marketing and recruitment efforts, by fostering the development and expansion of businesses, and by supporting strategies to facilitate the development of affordable workforce housing.

Operational Initiatives

- Review JCC Ordinances, Fees and Procedures to Remove Barriers for Business. Provide Incentives for Small Business, Home-Based Businesses and Entrepreneurs.
- Identify Opportunities to Prepare Shovel Ready Sites for Industrial and Business Development, with Preference for Locations within the Primary Services Area (PSA).
- Update Business Climate Taskforce Report.
- Implement Target Industries Study Strategies.
- Conduct Scenario Planning (Land Use and Fiscal Evaluation of Proposed Large Land Use Changes).
- Coordinate with Regional Partnerships (Tourism and Economic Department Initiatives).
- Establish Workforce Housing Task Force.

INVEST

COLLABORATE

MANAGE

What Are We Trying to Achieve?

Create a diverse and sustainable local economy that upholds JCC's commitment to protect community character, and supports regional economic development targets.

PROTECT

COLLABORATE

MANAGE

What Are We Trying to Achieve?

Protect community character, including natural and historic assets.

Improve visual character of the built environment.

Goal 4: Protected Community Character and an Enhanced Built Environment

James City County's unique historic assets, natural environment, rural character, hometown feel and attractive developments will be protected and maintained over time. Community corridors and older developed centers and neighborhoods will be enhanced and revitalized.

Operational Initiatives

- Implement Initiative to Improve Visual Character of Major Road Corridors.
- Develop Strategies to Promote Private Redevelopment of Underutilized Properties.
- Complete a Comprehensive Rewrite of the Zoning Ordinance to a Community Based Code.
- Develop Strategies for Open Space Preservation.
- Update Community Appearance Guide.
- Develop Local Green Infrastructure Map with HRPDC.
- Update Mandatory Tree Protection Standards.
- Update County Comprehensive Plan.

Goal 5: Exceptional Public Services

James City County will provide an exceptional quality of life to its residents by focusing on the provision of public services that meet the needs of a changing population, and by providing clear and transparent communications about County efforts and actions. The County will do this by maintaining a safe environment for its residents, improving services to the County's aging population, enhancing parks and recreational offerings, supporting strategies to facilitate the development of affordable housing for seniors and special needs populations, providing effective assistance to the County's underserved populations and improving County communications.

Capital Projects

- Implement Warhill Sports Complex Improvements (field hockey, lacrosse complex, traffic analysis/easement and new entrance road, multi-purpose field practice complex/restrooms, parking, community gym).
- Implement Safety/Fire Station Improvements (major renovation at Station 3, new fire training facility).
- Implement Jamestown Beach Event Park Improvements (Amblers House/Gardens, Event Area).
- Implement James City County Marina Improvements (Phase 1 – Bulkhead, Floating/Covered Docks Fuel).
- Implement Abram Frink Community Center Park Improvements (Splash pad/shelter).
- Implement Recreation Center Park Improvements (Parking Expansion, Outdoor Restrooms/Concession).
- Supplement Fire Safety Vehicles and Equipment (add 2 ambulances, add 1 pumper).
- Implement ADA Required Parks and Recreation Facility Improvements.

Operational Initiatives

- Develop Plan to Address the Health, Housing and Job Placement Needs of Homeless, Lower Income and Special Needs Populations.
- Develop a Strategic Plan for Seniors (Health, Housing, Transportation).
- Continue to Expand Parks and Recreation Services to Low Income Neighborhoods through Partnerships.
- Develop Strategies to Address Findings in Housing Conditions Study.
- Update Greenways Master Plan.
- Develop Mobile Integrated Healthcare / Community Paramedicine Program.
- Complete Fire and Emergency Service Accreditation (Fire and Emergency Service Self-Assessment, Community Risk Assessment - Standards of Cover).
- Complete Master Plan Revisions for All Individual Parks.
- Complete Parks and Recreation National Accreditation.
- Develop Plans to Enhance Emergency Preparedness.
- Expand Opportunities for Public Participation In JCC Government.

INVEST

SERVE

COLLABORATE

MANAGE

What Are We Trying to Achieve?

Improve County services that meet the demands of our growing and changing population.

Improve quality of life for the aging community and special needs populations.

Achieve greater awareness and understanding of County efforts and actions.

INVEST

COLLABORATE

MANAGE

What Are We Trying to Achieve?

Advancement of Williamsburg-James City County Public Schools through capital investment and strategic partnerships.

Expand educational offerings for all JCC citizens through partnership efforts.

Goal 6: High Quality Education

James City County will support high quality education by focusing primarily on its core fiscal responsibility of funding high quality public schools through joint facility planning efforts with WJCC, and by collaborating on opportunities to support other education efforts in the County.

Capital Projects

- Purchase Land (future schools and JCC facilities).
- WJCC Schools CIP FY2021-26 (New facilities construction).

Operational Initiatives

- Collaborate with WJCC Schools to Implement WJCC Strategic Plan.
- Collaborate with Regional Entities on Workforce Development and Training Initiatives.
- Collaborate with Child Development Resources to Implement Smart Beginnings Program.

Goal 7: Fiscally Efficient Government

The County will manage government finances using sound fiscal management practices to ensure short-term and long-term funding strategies for future investments. These investments will be funded using sustainable approaches that will maintain the fiscal health of the County.

Capital Projects

- Implement County Operations Improvements (real estate management software replacement, accounting and purchasing software replacement, land development software replacement).

Operational Initiatives

- Conduct a Cumulative Fiscal, Infrastructure, Community Character, Environmental Impact Analysis of Expanding Primary Services Area (PSA).
- Update and Coordinate CIP Process and Timeline (Expand Timeline, Coordinate Process with Strategic Plan, and Role of WJCC Schools).
- Refine Fiscal Impact Model to Assess Development Impacts on Fiscal Health.

MANAGE

What Are We Trying to Achieve?

County decision-making informed by the true costs and benefits of implementation.

Update financing and service provision tools to increase efficiency of government services.

Keeping the Strategic Plan Current and Relevant

James City County will evaluate whether the Strategic Plan is achieving its desired outcomes over time. Monitoring will provide the County with important feedback, while reporting will facilitate transparency through the planning process. Periodic amendments will allow the Strategic Plan to stay relevant and concurrent with other County plans, such as the budget, CIP and Comprehensive Plan. Together, these three components will ensure that the plan adapts to County conditions, budgets and opportunities as they change over time.

Plan for Monitoring and Reporting

James City County will use existing metrics, both objective and subjective, to monitor overall County performance and Strategic Plan performance. The County will use a combination of progress and scorecard reporting on County performance and plan implementation. The following lists of metrics are a starting point for developing an ongoing system to evaluate the Strategic Plan, and can be used to develop annual reports on plan performance. This framework is for the first annual report. Metrics may be revised on an annual basis and will likely include revisions to the examples below.

Metrics for County Performance

Tracking the performance of County operations as a whole helps to understand how the JCC government is working efficiently and effectively over time. It is recommended that the annual monitoring of County performance address four categories:

1. Transparency and Openness
2. Employee Satisfaction
3. Citizen Satisfaction
4. Fiscal Responsibility/County Operation

Existing James City County documents, including the County Budget and Comprehensive Plan, already incorporate many useful metrics. Using existing metrics maximizes the efficiency of the monitoring process. The recommended metrics for each of the four categories are included here. Recommended metrics not found in existing JCC documents are marked as "new."

Why is monitoring the plan important?

Community plans are only as good as their implementation. And just checking the box on whether an action has been undertaken is not enough. Plan monitoring allows the County to track over time how well it is achieving its goals. Annual evaluation using metrics to measure performance identifies where adjustments will be needed.

How will I be able to see the results of the monitoring?

Results will be reported in multiple ways:

- Printed and online reports.
- Online dashboard to show performance tracking over time.
- As part of the County's Annual Report.
- Presented to the Board of Supervisors at a public meeting.

Transparency and Openness

- # of public outreach meetings
- # of county speaking engagements
- # of news releases published by County
- # of pages viewed on website
- # of social media followers
- # of On Demand viewers (new)
- # of original long-form videos produced (new)
- # of original short-form videos produced (new)
- Resident rating of quality of County communications (new)

Employee Satisfaction

- Employee satisfaction rating based on staff survey (new)
- Average # of applicants per job vacancy
- % Turnover rate
- % of employee participants reporting improved skill/knowledge level after training

Citizen Satisfaction

- Resident perception of overall quality of life (new)
- Resident rating of the services provided by JCC overall

Fiscal Responsibility/County Operation

- Per capita tax burden (new)
- Total cost of risk as a % of total budget
- JCC credit rating
- County growth rate (new)
- Resident rating of the value of County services provided in relation to the taxes paid

Evaluating How We Are Achieving Our Goals

To best measure the performance of achieving the Strategic Plan goals, metrics should relate directly to the goals. The following lists incorporate performance indicators found in the FY2017-18 budget, the Comprehensive Plan, the Citizen Survey and additional recommended metrics to create a framework for evaluating the performance of the Strategic Plan. Any new recommended metrics are listed as "new."

Goal #1: Sustainable Long-Term Water Supply

- Amount of water secured for future as percent of projected future demand (new)
- Average water consumption of JCC businesses (new)
- Compliance with federal/state safe drinking regulations (new)

Goal #2: Modern Infrastructure, Facilities and Technology Systems

- # of neighborhoods receiving Neighborhood Drainage Program assistance
- Miles of public roads improved (new)
- Transit ridership/# of trips
- Resident rating of quality of roads and highways
- # of roadways with a failing level of service (new)
- # of new sidewalks/bike lanes installed (new)

Goal #3: Expanding and Diversifying Local Economy

- # of new businesses announced through OED
- # of small businesses assisted by the County
- # of expanded existing business announced for County through OED
- # of jobs in JCC
- # of workers commuting in/out of JCC and WBG
- Per Capita Income (new)
- Tax revenue generated from business, professional and occupational license
- % of the County total revenues attributed to the 10 largest businesses (index of diversification of business tax base)
- Dollars travelers spent on tourism
- # of infrastructure projects implemented to directly support non-residential economic development (new)
- Median house value
- Resident ratings on quality of housing opportunities for citizens

How were these metrics developed?

Many of the metrics are already tied to the County's:

- Comprehensive Plan
- Adopted budgets
- Other required plans and reports

Other metrics are recommended but not finalized. Once vetted and approved, they will be included in the plan.

Goal #4: Protected Community Character and an Enhanced Built Environment

- Resident perception of current amount of development by type: residential, commercial, industrial
- # of acres of land under permanent protection from development (new)
- Resident rating of community character protection (new)
- # of miles of overhead utility lines relocated underground (new)

Goal #5: Exceptional Public Services

- Average response time to high priority emergency service calls
- % of crimes cleared
- # of residents and students reached through Community Risk Reduction programs
- Resident perceptions of safety in James City County during daylight hours/during evening hours
- % of senior homeowners/renters who are cost-burdened (i.e. >30% of income on housing costs)
- # of affordable housing units
- # of households assisted by JCC DSS through housing, financial benefits and services programs.
- # of homeless persons
- Resident perception of parks and recreation facilities, programs and services (overall and for youths and seniors)
- Total attendance at Parks and Recreation programs and facilities
- # of households receiving financial aid from Parks and Recreation
- Number of installed transit stops and bus shelters
- # of homes considered "distressed" (new)
- # of citizens aged 60 and older receiving services from community agencies (new)
- # of citizens receiving services from various community agencies providing health and mental health services, such as Colonial Behavioral Health, Olde Towne Medical and Dental Center and Lackey Clinic (new)
- # of citizens living in poverty (new)
- # or % of seniors living in "substandard housing" (new)

Goal #6: High Quality Education

- Resident perceptions of JCC public library services
- Resident perceptions of the public school buildings or facilities
- Achievement scores for County students
- Graduation rates for County students
- % of students pursuing higher education or job training
- # of citizens receiving job training and/or job placement services (new)
- % of work-eligible adults who are unemployed (new)

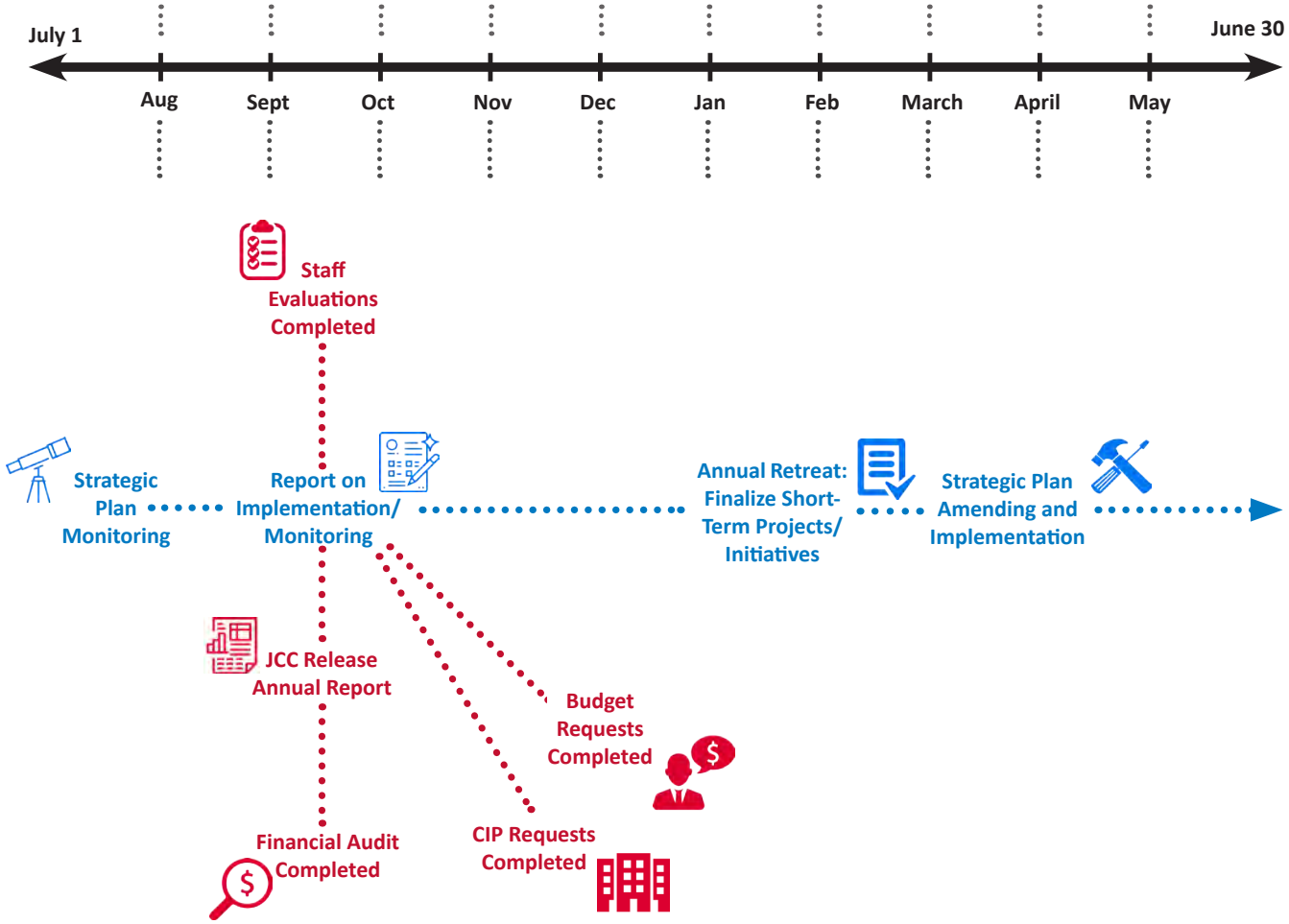
Goal #7: Fiscally Efficient Government

- Total cost of risk as a % of total budget
- JCC credit ratings
- % of capital projects completed on budget and on time
- Capital funding as % of asset/facility value (new)

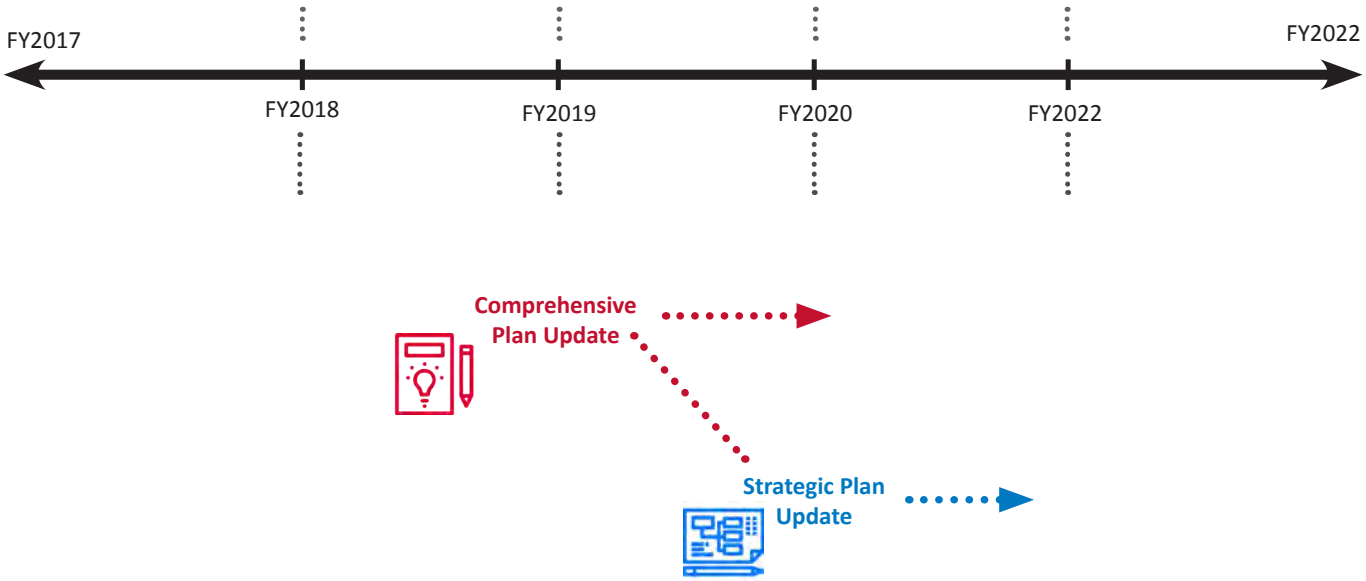
Amending the Strategic Plan Over Time

The County will revise the Strategic Plan annually as part of the performance evaluation process. A full Strategic Plan update should occur every five years, coordinated with the Comprehensive Plan update.

Schedule for Annual Revisions to Strategic Plan



Schedule for 5-year Update to Strategic Plan



James City County
VIRGINIA
Jamestown 1607

2035 Strategic Plan

A Guidebook for Investing in the County's Future

James City County, Virginia
Adopted November 22, 2016
jamescitycountyva.gov

Toward 2035
Leading the Way

James City County Comprehensive Plan

Adopted June 23, 2015

James City County
Virginia
Jamestown 1607

jamescitycountyva.gov/489/2035-Comprehensive-Plan

Economic Development

Introduction

James City County is a unique place and destination, making it a desirable community in which to visit, live and work. The uniqueness of the community is an important asset which can be used as an effective strategy to promote and nurture economic development in the County.

James City County's economy has been linked historically to strong industries such as manufacturing and tourism; however, advances in technologies have created the impetus for economic diversification and new opportunities. Globalization has expanded the County's economic opportunities from the local and regional to the international arena.

In order to provide for a diverse, competitive and prosperous economy for all its citizens, James City County continues to develop economic development strategies and policies which are sound and comprehensive in scope.

Citizen Commentary

Economic development continues to be an important topic of discussion for James City County, as many citizens have offered opinions about the rate and type of development that best suits the community. The 2014 Virginia Tech Citizen Survey asked respondents to rate the current amount of commercial and industrial development. Opinions indicate a shift away from new commercial development as only 11% thought the County had too little, whereas the remaining 83% were split between believing the amount of commercial development was just right (40%) and too high (45%).

Opinions on the amount of industrial development were not as strong, as 19% of respondents did not know or did not wish to respond when asked about industrial development, as compared to only four percent of non-responders to the commercial question. Overall 24% thought the amount of industrial development was too low, 44% of the respondents thought it was about right, and eight percent thought the amount was too high.

As a follow-up to the survey, Community Workshop respondents indicated that they would like to see existing empty buildings and shopping centers rehabilitated and reused where possible before constructing new commercial development. Community Workshop participants identified that the preferred ways to promote redevelopment should be incentive-based programs, and to identify and promote specific areas for redevelopment and create shovel-ready development sites. There were a small number of participants who preferred that the County not promote economic redevelopment.

When asked what important features citizens would like to see in the business and industries the County attracts, many respondents answered with the following (in no particular order): clean industries, high paying jobs, businesses that promote green building techniques, research and development jobs, and businesses that have low impact on natural resources. Community Workshop attendees indicated that the most important attributes are quality jobs, fiscal contribution, and community values. There were also statements made in support of encouraging more agricultural economic development, whether through facilitating more farmers markets and other direct selling opportunities or providing additional options for land uses that promote the rural economy. A majority of participants desired more support for local businesses and less retail overall.

Another significant aspect of economic development that was frequently mentioned in multiple venues is the retention and attraction of a skillful young workforce. To address these workforce needs, many residents voiced that the County should expand technical and workforce training opportunities, echoed by 90% of Citizen Survey respondents who indicated that this is "very" or "somewhat important."

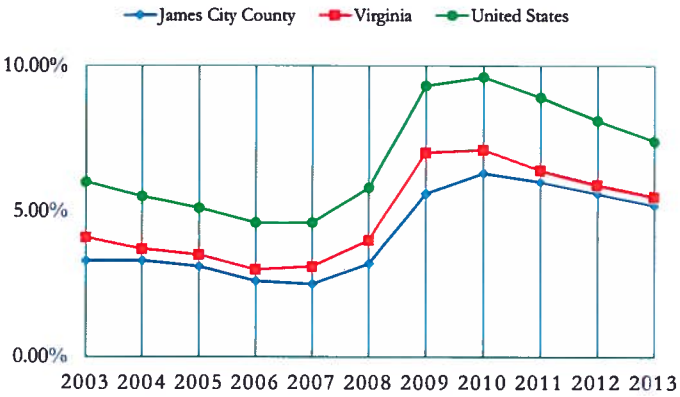
Workforce

Employment, Unemployment and Commuting Patterns

Our local economy is not isolated. While still being subject to national trends, we can measure ourselves relative to others to get a better understanding about how our actions and policies affect our local economic indicators.

As shown in **Figure ED-1**, while James City County saw a 3.8% increase in the unemployment rate from 2.5% in 2007 to 6.3% in 2010, this increase was lower than comparable numbers at the State and national levels. According to the Virginia Employment Commission (VEC), the unemployment rate for Virginia rose four percent from 3.1% in 2007 to an average of 7.1% in 2010. Nationwide, the unemployment rate rose five percent from 4.6% in 2007 to 9.6% in 2010. As of 2013, James City County has an unemployment rate of 5.2%, as compared to 5.5% for Virginia and 7.4% for the United States.

Figure ED-1. Unemployment Rates



Source: Virginia Employment Commission, Local Area Unemployment Statistics

According to Virginia Employment Commission (VEC) total annual employment statistics, James City County had 26,985 jobs in 2012. Overall, James City County and York County fared better than the Hampton Roads region in job growth rate during the past 10 years and also exceeded the State job growth rate during the same period (See **Table ED-1**). In fact, since 2007, James City County has seen an increase in jobs, whereas other localities in the Historic Triangle have been declining.

Table ED-1. Total Annual Employment

Year	James City	York	Williamsburg	Hampton Roads	Virginia
2001	20,944	15,784	19,436	698,331	3,436,172
2002	21,560	16,432	19,176	701,846	3,404,760
2003	22,611	17,117	18,119	706,387	3,410,834
2004	22,058	18,766	17,289	719,765	3,495,767
2005	23,681	19,639	16,624	731,869	3,578,558
2006	24,764	20,787	16,642	739,194	3,636,417
2007	25,690	22,514	15,924	744,054	3,672,958
2008	27,222	21,898	15,093	740,397	3,665,654
2009	26,269	21,269	14,259	712,354	3,545,623
2010	26,177	20,971	14,197	705,714	3,536,676
2011	26,385	21,319	13,388	705,315	3,578,848
2012	26,985	20,804	13,709	711,311	3,619,176
Annu-alized 10 Year Growth	2.3%	2.4%	-3.3%	0.1%	0.6%

Source: Quarterly Census of Employment and Wages

The economy in James City County relies a great deal on tourism, health care, manufacturing, educational services and retail, as those are the top five employment industries as can be seen in **Table ED-2**. James City County seeks to keep those strong, but also to diversify and attract additional jobs for the labor force. It is also worth noting that a little over 1,600 jobs come from manufacturing industries. These jobs generally encompass many desirable traits for employees, including higher pay, full-time/year-round employment and benefits. Continuing to attract these high quality jobs is an important goal for James City County.

Table ED-2. James City County Industry Employment, 2012

Industry	Employment
Health Care and Social Assistance	3,706
Retail Trade	3,563
Accommodation and Food Services	2,995
Educational Services	2,253
Manufacturing	1,659
Construction	1,393
Administrative Services	1,199
Professional, Scientific and Technical Services	1,079
Wholesale Trade	811
Public Administration	798
Management of Companies & Enterprises	704
Real Estate and Rental and Leasing	648
Other Services	500
Finance and Insurance	423
Information	278
Agriculture, Forestry, Fishing and Hunting	34
Total Employment Attributed to ND* Industries	4,942
Arts, Entertainment and Recreation	-
Mining, Quarrying, and Oil and Gas Extraction	-
Utilities	-
Unclassified	-
Total, All Industries	**26,985**

* ND - Data that is non-disclosable due to employer confidentiality rules

Source: Quarterly Census of Employment and Wages

Looking beyond the number of jobs offered in James City County to the people who hold them, according to the U.S. Census Bureau, approximately 15,848 workers come to the County, whereas 16,440 commute out of James City County for work. This slight out migration may indicate that some of the most desirable jobs are located in other localities, but that citizens choose to live in James City County.

Workplace and Business

Major Employers

The largest employers in the County, alphabetically by industry sector, include Kingsmill Resort, Williamsburg Plantation and Diamond Resorts (Accommodation and Food Service); SeaWorld Parks and Entertainment (Arts, Entertainment and Recreation); Branscome (Construction); Williamsburg-James City County Schools (Educational Services); Riverside Regional Medical Center, Williamsburg Landing, WindsorMeade of Williamsburg and Eastern State Hospital (Health Care and Social Services); Anheuser-Busch, Lumber Liquidators, Owens-Illinois, Ball Metal Beverage Containers, Printpack and Greystone of Virginia (Manufacturing); James City County (Public Administration); Martin's Food Market, Farm Fresh, Food Lion, Captain George's Seafood Restaurant, Target Corporation (Retail Trade), Walmart Import Distribution Center and Avid Medical (Wholesale Trade).

According to the Virginia Employment Commission Quarterly Census of Employment and Wages for the 4th Quarter 2013, each of the employers on the list above has 100 or more employees. **Table ED-3** lists the number of establishments in the County by number of employees. Establishments with one to four employees represent the largest number of business establishments in the County.

Table ED-3. Size of Business

Establishment Size	Number of Establishments
0-4 employees*	913
5-9 employees	310
10-19 employees	211
20-49 employees	157
50-99 employees	54
100-249 employees	28
250-499 employees	**
500-999 employees	4
1000+ employees	ND**
Total	**1,683**

* Zero employees typically represent new startup firm or sole-proprietorships.
** Non-disclosable data.

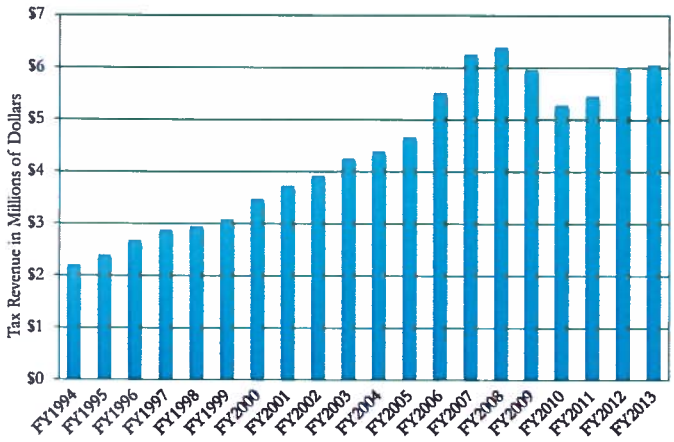
Source: James City County Economic Profile, VEC, which used VED, Quarterly Census of Employment and Wages (QCEW), 4th Quarter (October, November, December) 2013.

Business Growth

One important measure of business growth is the Business, Professional and Occupational License (BPOL) paid annually by businesses when renewing their business license in the County. A business license is required of all businesses (except manufacturing businesses), and is based

upon gross receipts or anticipated gross receipts. The tax revenue generated from business licenses sharply increased in Fiscal Years 2006-2008. After declines in 2009 and 2010, BPOL revenue once again saw increases from 2011-2013. **Figure ED-2** shows the upward trend the County has experienced in BPOL revenue since 1994. This positive trend is a result of new business activity and the growth of existing business.

Figure ED-2. BPOL Tax Revenue in James City County



Source: Va Auditor of Public Accounts: Comparative Report of Local Government Revenues and Expenditures, HRPDC

Another measure of business growth is the amount of capital investment made by businesses in the County. Between 2009 and 2013, the Office of Economic Development (OED) worked directly with 10 existing businesses and one not-for-profit generating investments totaling $93.5 million to expand existing operations in the County. Additionally, during the same time period, OED worked with five new businesses with investments totaling $9.1 million. Keeping in mind that this number is representative of only those businesses that worked directly with OED, the total capital investment made in the County is actually much higher, but ultimately cannot be tracked.

Business growth remains strong in James City County. In addition to being home to five Fortune 500 firms, the County continues to see significant growth in both the number of small businesses and start-up companies. According to information from the Virginia Employment Commission's Labor Market Information (LMI), James City County has seen a 37.5% increase in new startup firms between 2009 and 2013. Overall between 2011 and 2013, the number of new startup firms increased by 226 in James City County, as compared to 155 in York County and 34 for the City of Williamsburg. These sectors have and will continue to play a significant role in the County's growing economy.

Office of Economic Development (OED)

The mission of James City County's OED is "to foster the development and expansion of a diversified and healthy base of primary business and industry that will better balance the tax base, increase job opportunities and enhance both the quality and standard of living in James City County." The OED works to accomplish this mission through its efforts to increase commercial tax revenue, to attract improved job opportunities for County citizens and to enhance the quality of life for local residents. To accomplish these tasks, OED's core efforts are focused on business retention, expansion, attraction and creation. The OED is located at 101-D Mounts Bay Road at the James City County Government Center and can be accessed online at www.yesjamescitycountyva.com.

Economic Development Authority of James City County (EDA)

The EDA is a seven-member voluntary board whose members are appointed by the Board of Supervisors and serve staggered four-year terms. The EDA's purpose is to assist the County and the OED in expanding James City County's business tax base in order to maintain and enhance the quality of life for County's citizens. The EDA also acts as a conduit for issuing Industrial Revenue Bonds for manufacturing projects and qualifying medical, assisted living, nonprofit or public facilities. The EDA can be reached by contacting the OED at the address above or via phone at 757-253-6607 or by email at yesjcc@jamescitycountyva.gov.

Business Climate Task Force (BCTF) Report

In January 2008 the Business Climate Task Force Report was released along with recommendations to improve the business climate in the County. One of the main tasks of

the BCTF as indicated by its mission statement was to "identify qualities, characteristics and categories of business preferred in James City County and propose policies, programs and ordinance changes that will attract, retain, and expand those businesses." Instead of targeting specific industries/businesses clusters, the BCTF identified attributes and qualities to determine the types of business most desired in the County. These attributes, as seen on **Table ED-4**, were arranged in the following five broad categories: quality jobs, community values, fiscal contribution, environmentally sensitivity and stability. Many of the attributes and qualities described by the BCTF are sustainability indicators (e.g., economic diversification, fair pay, high wages, low impact on natural resources), which can be used as criteria for identifying and targeting the desired types of industries the County would like to attract.

During the 2014 Community Workshops, participants were asked what important features they would like to see in the business and industries the County attracts. Using the attributes from the BCTF Report and an "other" category, participants most often answered that attracting quality jobs was most important. These types of jobs would include those with fair pay, benefits and year-round full-time employment. Other high ranking responses were attracting businesses that provided fiscal benefits to the County, as well as those that promoted our community values.

Wages and Income

According to the VEC, the average weekly employee wage in James City County was $666 in the third quarter of 2013. This figure is equivalent to $16.65 per hour or $34,632 per year, assuming a 40-hour week year round. The County's average hourly wage is slightly higher than the City of Williamsburg's $16.53 per hour and York County's $16.20 per hour. However, when compared to the Metropolitan Statistical Area (MSA) and State averages ($20.33 per hour and $24.83 per hour respectively), the localities in the Historic Triangle as a whole display much lower than average wages. The lower wages compared to the MSA and State may contribute to the commuting patterns as mentioned in the employment discussion at the beginning of this section.

Per Capita Income (PCI)

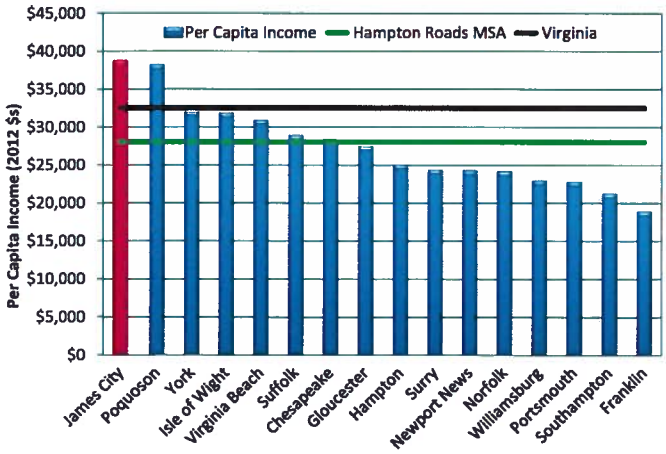
According to the U.S. Census, per capita income is one of the most comprehensive ways to measure household income. PCI is defined as "the average obtained by dividing aggregate income by total population of an area." The American Community Survey reported the average 2012 PCI for James City County as $38,788. This PCI ranked was 116% of the State average, $32,517, and 130% of the national average, $27,319. See **Figure ED-3**.

Table ED-4. Business Climate Task Force Table of Attributes

Categories	Qualities					
Quality Jobs	Fair pay	Benefits	Attributes and year-round, full-time employment	Diversification of the labor force	Interest in wellbeing of employees	
Community Values	Respectable corporate citizen	Enhances citizen's quality of life	Uses local resources, buys locally	Distinctive, unique	Promotes community values	Likes, values, and respects community
Fiscal Contribution	Generates local tax revenue	Favorable tax/ resource usage ratio	Exports goods/services; imports new dollars	Recycles local spending	Economic diversification	Supports other local business
Environmentally Sensitivity	Clean	Low impact on natural resources				
Stability	Economic diversification	Stability and locality	Less affected by macroeconomic changes	Headquarters location		

Source: Business Climate Task Force Report, 2008

Figure ED-3. Per Capita Income in the Past 12 Months



Source: U.S. Census American Community Survey, HRPDC

Household Income

The U.S. Census Bureau defines household income as "the sum of money income received in a calendar year by all household members 15 years old and over, including household members not related to the householder, people living alone, and other non-family household members." The median household income provides income information by dividing households into two equal parts with the first half of the households earning less than the median household income and the other half earning more. The most recent data on median household income is provided by the U.S. Census American Community Survey (2012 for James City County and York and 2008-2012 five-year estimates for Williamsburg). In 2012, James City County had the highest median household income of the localities of the Historic Triangle, $79,435, placing York County and the City of Williamsburg ($71,974 and $50,865 respectively).

Poverty

According to the 2012 American Community Survey, the poverty rate for James City County (for individuals 18 and over) was 10%, which was below the poverty rates for both the MSA (13%) and the State (12%).

Taxes

Tax Rates

Compared to other localities in the Historic Triangle area, James City County levies a relatively higher tax rate. In 2013, the real estate tax was 77 cents per $100, slightly higher than York County (75 cents) and Williamsburg (57 cents). However, the County compares favorably to other Peninsula localities such as Newport News ($1.22) and Hampton ($1.06). James City County's general personal property tax rate (not including business equipment, machinery and tools), has remained constant for the last 20 years at $4 per $100 of assessed value. York County has the same tax rate. Williamsburg has a slightly lower personal property tax rate at $3.50 per $100, while Newport News and Hampton have a slightly higher tax rate at $4.50 and $4.25 per $100 of assessed value, respectively.

Principal Taxpayers

According to information provided by the Department of Financial and Management Services, Anheuser-Busch was the overall highest taxpayer in 2013 with $4.8 million in property taxes assessed or 4.09% of all taxable revenue for the County. SeaWorld Parks and Entertainment was the second highest taxpayer with $1.84 million, representing 1.534% of total County revenues, followed by Walmart Import Distribution Center (0.98%), Powhatan Plantation Owners Association (0.82%), Virginia Electric and Power Company (0.75%), Premium Outlets of Williamsburg (0.70%), Williamsburg Landing, Inc. (0.63%), Ball Metal Beverage Containers (0.58%), Owens-Illinois (0.58%) and Williamsburg Plantation Owners Association (0.55%).

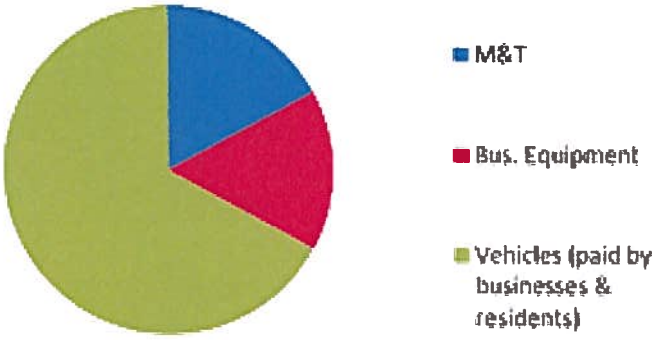
It is important to note that the percentage of the County total revenues attributed to the 10 largest business/industries has been gradually diminishing over the past 10 years, an indication that the business tax base has been diversifying. For the 2003 Fiscal Year, property taxes assessed on 10 of the largest businesses/industries contributed a total of 14.8% of total County revenues or $10.9 million; for the 2013 Fiscal Year the 10 largest businesses contributed approximately 11.2% of the total revenues or $13.3 million.

Commercial and industrial properties comprise a small part of the total properties in the County, but generate proportionally higher real estate tax revenues. In Fiscal Year 2013, 4.03% of the taxable parcels in the County were commercial/industrial properties; those parcels generated

13.7% of the total assessed value for the County. By contrast, 94.4% of all taxable parcels in the County were single-family residential; those parcels generated 80.5% of the total assessed value for the County.

Similar to taxes paid by County residents, County businesses also pay Personal Property Tax in addition to paying Real Estate Property Tax. Personal Property Tax is assessed on vehicles, as well as on other business equipment and machinery and tools (M&T). For FY13, 17.1% of the total Personal Property Tax revenue was from M&T and 15.7% was from Business Equipment. The remaining 67.1% includes both revenue from businesses for business vehicles and revenue from residents for personal vehicles (See **Figure ED-4**).

Figure ED-4. Personal Property Revenue FY13



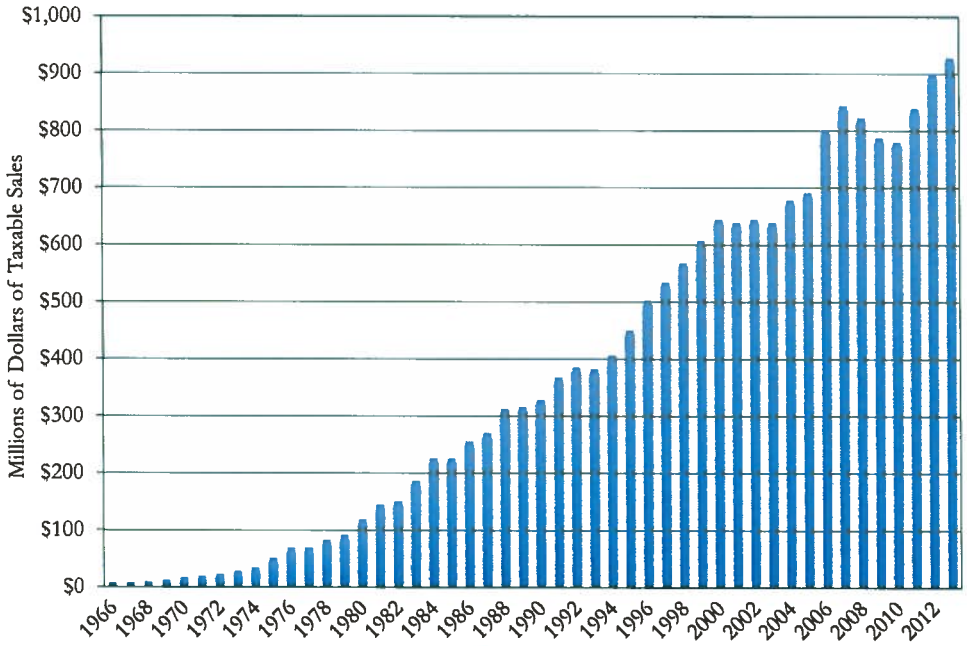
Retail Sales

According to the Weldon Cooper Center for Economic and Policy Studies, in 2013, Total Taxable Sales in James City County were $928.5 million, which represents an increase of 18% over that of 2009 (See **Figure ED-5** below). During the same time period, the City of Williamsburg saw an increase of 20%, the State saw an increase of 10%, and York saw a modest decrease of 1.7%. Additionally, the County has seen significant growth in Local Option Sales Tax (LOST), which is the taxable portion of retail sales that remains with the locality. Between 2010 and 2013, the LOST for James City County grew by 20.5%.

Tourism

Tourism plays an important role in both the regional and State economies. A study prepared for the Virginia Tourism Corporation, Economic Impact of Domestic Travel Expenditures on Virginia Counties 2007, found that domestic travelers spent close to $18.7 billion on transportation, lodging, food, entertainment, recreation and incidentals in Virginia. According to the 2012 report, domestic travel expenditures in the State increased to $21.2 billion, not adjusted by inflation, and directly supported 210,000 jobs within Virginia. Additionally, tax revenue generated by domestic travel in Virginia reached $2.7 billion, up 3.3% from 2011.

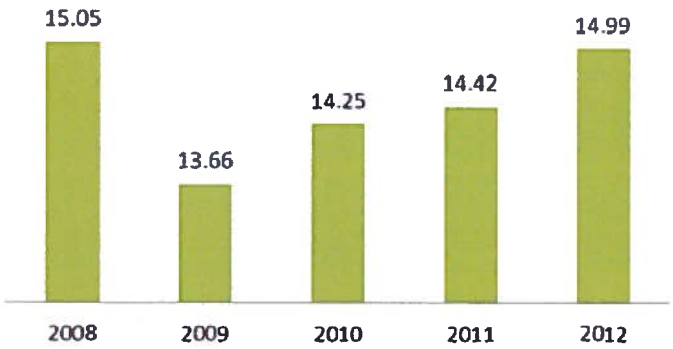
Figure ED-5. James City County Annual Retail Sales



Source: Virginia Department of Taxation, HRPDC

The Virginia Beach-Norfolk-Newport News MSA is well known for its tourist attractions and hospitality industry. In 2012, approximately $374.57 million was spent in James City County on items related to tourism (e.g. transportation, lodging, food, entertainment, recreation, etc.), which ranked fourth among the 14 localities within the MSA behind Virginia Beach, Norfolk and the City of Williamsburg. Local Tax Receipts for the County were $14.99 million in 2012, an increase of four percent over 2011 (See **Figure ED-6**).

Figure ED-6. JCC Tourism Local Tax Receipts in Millions



Source: Virginia Locality Economic Impact of Travel Data

Agriculture

The impact of traditional agricultural activities in the County's economy has been gradually declining over recent years; however, there has been a renewed interest in smaller niche agricultural markets, locally-grown foods and agritourism activities. This has been manifested in a small increase in the number of farms in the County but a decreasing average farm size. According to the Bureau of Labor Statistics (BLS), in 2009 approximately 38 jobs were associated with agriculture, forestry, farming and hunting activities in the County. This does not include sole and/or part-time proprietors so likely undercounts the actual number of jobs, especially when this statistic is compared to the 2012 Census of Agriculture. The Census of Agriculture states that there are 83 principal farm operators in the County, of which more than 70% are part-time farmers. This statistic also does not account for employment in other related industry sectors such as food manufacturing, tourism, equine activities, specialty food stores and food services that often rely on support or products from local agriculture. The 2009 average weekly wage for the agricultural jobs sector increased to $364 from $252 in 2007. A 2013 Assessment of Rural Economic Activity in James City County conducted by George Mason University determined that currently, agricultural activities represent a small percentage of the County's overall economy, but that there is significant room for the industry to grow and meet surrounding market demand, especially in the following four areas:

1) Traditional agricultural activities
2) Forestry activities
3) Value-added enterprises
4) Rural tourism and outdoor recreation

It is also important to note that the statistics provided by the BLS and by the Census of Agriculture do not provide a holistic picture of the state of agriculture in the County in terms of support for community values and quality of life. In recognition of this, the EDA created the Rural Economic Development Committee (REDC) in 2009 to explore opportunities for increasing the rural economy. The REDC completed a Strategy for Rural Economic Development that focuses on 13 projects in three broad categories (marketing/public relations, business development and facilities/capital projects) that can help increase the economic contribution of the County's rural lands. A vital, robust, rural economy will contribute to the diversification of the County's overall economy. Additionally, it will provide more choices and opportunities for rural landowners, preserve the rural landscape and support and complement the existing manufacturing, service and tourism sectors of the economy.

Economic Opportunities

Location

James City County is strategically located on the Virginia peninsula, midway between the Cities of Richmond and Virginia Beach, along the I-64 corridor. This location provides access to a number of economic drivers including the military, technical and research and development establishments in the Hampton Roads area and Port of Virginia, providing increased opportunities and options for exporting and importing activities through cooperation with regional partners. Also, proximity to academic research and workforce development activities at the College of William and Mary, Thomas Nelson Community College, Christopher Newport University and Old Dominion University present additional economic opportunities in a number of fields, including business, medical, multiple scientific and marine and advanced manufacturing.

Regional Efforts

The economic development offices of the three localities of the Historic Triangle collaborate on many ongoing initiatives in support of the local economic base. Examples include the Triangle Business and Innovation Center (TBIC), supported by the Economic Development Authorities (EDA) of each locality, which provides tangible hands-on support to start-up and small businesses; Start! Peninsula, an annual event to encourage entrepreneurship activity within the Peninsula; an annual regional business appreciation event and Global Entrepreneurship Week (in partnership with Thomas Nelson Community College). Other regional efforts include the Economic Diversification Task Force, Arts Month and the Economic Progress Committee (in partnership with the Greater Williamsburg Chamber and Tourism Alliance).

The College of William and Mary

The College of William and Mary remains a strong resource for the community. Through its numerous affiliations, the College has been active in linking companies to the development of new, cutting-edge technologies and ongoing research in areas such as sensors, modeling and simulation, material and applied sciences, alternative energy, bioscience, bioinformatics, aging and geriatric health and marine science. Furthermore, research and development activities have the potential to cluster and create an environment that is attractive to knowledge-based businesses.

Thomas Nelson Community College – Historic Triangle Campus

Throughout the years, Thomas Nelson Community College (TNCC) has played an increasingly important role in serving the workforce development needs of the business community and in helping individual citizens achieve their educational goals. TNCC first began providing classes in the Historic Triangle in the late 1990s. In 2009, a new permanent campus was established in James City County. The campus includes a 120,000-square-foot facility with classrooms, five science laboratories, a nursing laboratory, the Learning Resources Center and a state-of-the-art facility encompassing the College's Dental Hygiene Program.

TNCC offers a variety of programs at both its Hampton and Historic Triangle Campuses ranging from academic to career studies certificates. It also offers a dual enrollment program allowing high school students from Williamsburg-James City County Schools to earn college and high school credit concurrently. One of the college's main focuses is to meet the educational and workforce development needs in the Historic Triangle by providing cooperative education (co-op) programs for business, government and community employers, just-in-time education, and customized training. To this end, TNCC has established the Thomas Nelson Workforce Center on Ironbound Road in the New Town area of the County. The Center offers first-class training and economic and workforce development services for public and private organizations, including the business community, company employees and entrepreneurs.

James City County Enterprise Zone

The purpose of the Enterprise Zone is to create an improved climate for private sector investment, development and expansion, thereby improving the overall physical and social conditions within the zone.

Qualifying businesses locating within the Enterprise Zone are eligible for certain State and local incentives. Additional information, including the location of the Enterprise Zone, may be obtained from the James City County Office of Economic Development.

Spotlight on Successes and Opportunities

Building a diverse, balanced economy requires strategies that help it become adaptive, resilient, diverse and vibrant, providing high quality jobs and stability for County residents. A diverse employment base is, for instance, one of the features which can be used to gauge the vitality of James City County's economy. Income that meets the needs of workers and reduction of poverty rates are also important indicators.

Since 2009, a number of efforts have helped encourage a balanced mixture of business expansion and redevelopment. For instance, the Office of Economic Development has worked with 10 businesses that accounted for $93.5 million dollars in capital investments. Of that $93.5 million, $44 million was associated with expansions to Manufacturing/Wholesale Trade industries. Specifically, there have been expansions in the Jacobs/Hankins Industrial Park, as well as to the Lumber Liquidators facility in Stonehouse Commerce Park. County staff has also been working with developers on a number of redevelopment projects, including multiple tenants at the Candle Factory in Norge, Candy Store in Lightfoot and Colony Square Shopping Center on Jamestown Road.

In an effort to promote economic development, County staff also processed multiple amendments to the Zoning Ordinance, with particular emphasis on the business, industrial and mixed use districts. These amendments included streamlining the development review process, as well as expanding the list of uses that can be approved by-right.

James City County has also pursued actions to diversify the County's economy and support the tourism industry. Another focus of economic development has been the promotion of sports tourism activities in the County. James City County has hosted the National Softball Association Tournament, the LPGA golf tournament at Kingsmill and the Top Gun Football Academy at the Warhill Sports Complex.

James City County partners with a number of different regional organizations to further entrepreneurship and develop the transportation system. Work with the Thomas Nelson Workforce Center, the College of William and Mary, as well as adjacent localities' cooperation on the Triangle Business and Innovation Center, have helped foster development of the workforce in our County and provide training opportunities and support for small businesses and startups. With respect to transportation improvements, County staff has worked on a number of initiatives to further the economic interests of the area, including: the Mooretown Road extended corridor study, Route 60 relocated/Skiffes Creek connector project and widening of I-64.

As James City County moves forward, all of these accomplishments help to show important areas of the County's economic development strategy. However, there will also be new areas of focus, including rural economic development. The Rural Economic Development Committee (REDC) strategies will help increase the economic contribution of the County's rural lands. Implementation of these strategies will hopefully produce a vital, robust, rural economy that will contribute to the diversification of the County's economy.

Goals, Strategies and Actions

Goals

Economic Development (ED) – Build a diverse, balanced local economy that supports basic needs of all segments of the community and contributes positively to the quality of life.

Strategies and Actions

ED 1 – Encourage a balanced mixture of commercial, industrial, and residential land uses that support the County's overall quality of life, fiscal health and environmental quality.

- **ED 1.1** – Maintain an active and effective economic development strategy, which includes existing business retention and expansion, assistance to new business, new business recruitment and support to the tourism industry.

  ED 1.1.1 – Build on the New Town area and similar locations within the County as lifestyle commercial and residential hubs.

- **ED 1.2** – Encourage the creation of new and retention of existing small businesses, home-based businesses and entrepreneurial efforts including women-owned and minority-owned businesses by:

  ED 1.2.1 – Creating new and supporting programs to assist small businesses, home-based businesses and entrepreneurial efforts.

  ED 1.2.2 – Reviewing the Zoning Ordinance to ensure it allows appropriate home occupations and other small businesses consistent with neighborhood and community character.

  ED 1.2.3 – Developing strategies that strive to retain those companies who successfully graduate from the Triangle Business Innovation Center (TBIC).

- **ED 1.3** – Continue to emphasize the benefits of locating new business and industry within the County's Enterprise Zone.

  ED 1.3.1 – Continue to provide incentives to business that locate within the Enterprise Zone.

  ED 1.3.2 – Continue to ensure that the land area available to James City County for inclusion in the Enterprise Zone as allowed by the Code of Virginia is maximized.

- **ED 1.4** – Encourage private/public partnerships or similar initiatives to ensure the development and attraction of quality and innovative business ventures.
- **ED1.5** – Identify regulatory barriers in County regulations (such as special use permits), policies and procedures that may unnecessarily inhibit commercial and industrial development and amend the Zoning Ordinance to address these issues.
- **ED 1.6** – Update and support the recommendations of the Business Climate Task Force Report as determined by the Board of Supervisors.
- **ED 1.7** – Continue to pursue and develop additional incentives for both new and existing business development.
- **ED 1.8** – Update the Economic Diversification Task Force Report and support the implementation of identified initiatives.
- **ED 1.9** – Consider an update or progress report to the 2008 Business Climate Task Force Report.

ED 2 – Continue to diversify James City County's economy.

- **ED 2.1** – Support the development of diverse types of retail and non-retail core business.
- **ED 2.2** – Consider establishing and expanding incentive zone(s) and other programs as allowed by the Code of Virginia.
- **ED 2.3** – Promote tourism and associated industries as a year-round industry.
- **ED 2.4** – Analyze the opportunities for development and expansion of healthcare business, medical research sector jobs and related services.
- **ED 2.5** – Attract "clean and green" development and redevelopment projects that also offer enhanced job opportunities.
- **ED 2.6** – Analyze opportunities for expansion of new employment sectors, such as those in clean industries and technology focused industries.

ED 3 – Foster the development, training/retraining, diversification and retention of the James City County workforce.

- **ED 3.1** – Support public and private entities, like the Peninsula Council for Workforce Development.
- **ED 3.2** – Support the provision of mixed cost and affordable/workforce housing near employment centers and transportation hubs.
- **ED 3.3** – Working with Williamsburg-James City County Schools (WJCC), New Horizons Regional Education Center and local colleges and universities, facilitate technical and professional opportunities for high school and college students through internship, training and mentorship programs.
- **ED 3.4** – Promote the retention and creation of full-time job opportunities with wages and benefits sufficient to make housing attainable.
- **ED 3.5** – Leverage the resources of local colleges and universities to companies seeking technical and research assistance and job training.
- **ED 3.6** – Promote job opportunities for retirees still wanting or needing to work.
- **ED 3.7** – Support businesses, programs and developments that attract young professionals and retain the community's graduates.

ED 4 – Maintain partnerships with the College of William and Mary and Thomas Nelson Community College.

- **ED 4.1** – Work with the College of William and Mary Office of Economic Development and the Thomas Nelson Workforce Development Center in support of business attraction and expansion.
- **ED 4.2** – Support collaborations with the College of William and Mary, associated partnerships and/or other institutions to attract and mentor companies.
- **ED 4.3** – Partner with the College of William and Mary to attract and expand technology companies in designated research and technology zones, particularly in the areas of sensor, robotics, modeling and simulation and bioscience.
- **ED 4.4** – Support collaborations with the College of William and Mary Office of Economic Development and Thomas Nelson Community College to enhance training opportunities that meet the needs of our existing business community and target industry segments.

ED 5 – Encourage infill development, the redevelopment of existing parcels, and the adaptive reuse of existing buildings to efficiently use infrastructure and natural resources.

- **ED 5.1** – Encourage the rehabilitation of abandoned and/or underutilized facilities by promoting them to new business.
- **ED 5.2** – Identify regulatory barriers in County regulations (such as special use permits), policies and procedures that may unnecessarily inhibit redevelopment and adaptive reuse and amend the Zoning Ordinance to address these issues.
- **ED 5.3** – Encourage new development and redevelopment of non-residential uses to occur mainly in areas where public utilities are either available or accessible within the Primary Service Area (PSA) and infrastructure is supportive.
- **ED 5.4** – Facilitate the development of sub-area master plans for strategic areas such as the Croaker Interchange and the Lightfoot Corridor.
- **ED 5.5** – Provide meaningful incentives supporting sustainable design and for achieving LEED (Leadership in Energy and Environmental Design) or other similar sustainable design standards for the construction and/or retrofitting of non-residential buildings.
- **ED 5.6** – Develop strategies to encourage the redevelopment of commercial areas throughout the County.
- **ED 5.7** – Promote resource conservation techniques among new and existing business.

  ED 5.7.1 – Emphasize the attraction, retention and expansion of businesses that are less water dependent.

  ED 5.7.2 – For those businesses with higher water use, encourage and facilitate the use of grey or reclaimed water usage to meet water needs.
- **ED 5.8** – Provide adequate water and sewer services to designated industrial and commercial areas consistent with applicable policies and regulations.
- **ED 5.9** – Promote desirable economic growth through the provision of water and sewer infrastructure consistent with the Comprehensive Plan policies and the regulations governing utility service in partnership with the James City Service Authority (JCSA), Newport News Water Works and HRSD.

ED 6 – Support the tourism industry for the Historic Triangle and promote James City County as a destination of choice in the region.

- **ED 6.1** – Foster tourism development in James City County and the Historic Triangle by continuing to partner with the Greater Williamsburg Chamber and Tourism Alliance.
- **ED 6.2** – Identify and protect historic sites that are important to the heritage of James City County, allowing them to be preserved for future generations.
- **ED 6.3** – Support ecotourism and agritourism initiatives, identifying and designating lands and reducing barriers in support of this purpose.
- **ED 6.4** – Support the development of sporting events and potential facilities that promote the County as a sports tourism destination and other special events in James City County.
- **ED 6.5** – Support tourism initiatives that promote the Historic Triangle as an arts destination, including cultural and culinary activities.

ED 7 – Protect the County's existing physical transportation infrastructure. Plan and promote the development and coordination of transportation systems with the location of non-residential uses in a manner that maximizes the County's economic potential consistent with the policies of the Comprehensive Plan.

- **ED 7.1** – Participate in the development of master plans for the County's I-64 interchanges, specifically the Croaker Road and Barhamsville Road interchange areas, to preserve capacity for economic development for these areas.
- **ED 7.2** – Collaborate with the Virginia Department of Transportation (VDOT) and adjacent localities to improve access to interstate and major arterials such as relocating Route 60 East.
- **ED 7.3** – Assess and collaborate on opportunities and advocate for public transit (e.g. commuter rail, light rail or bus rapid transit service) to economic and business centers.
- **ED 7.4** – Improve the utilization of rail/interstate highway nodes and access to deep water ports to facilitate commercial freight access to and from local industries and for tourism access.
- **ED 7.5** – Support continued local access to general aviation facilities.
- **ED 7.6** – Work with regional airport facilities to promote additional direct commercial flights to serve the destinations preferred by James City County businesses.

ED 8 – Acknowledge the changing nature of the County's rural economy and promote viable traditional and emerging rural economic development initiatives as appropriate.

- **ED 8.1** – Support traditional agricultural and forestal uses through ordinances and policies favorable to such uses.
- **ED 8.2** – Coordinate with the State and private entities to market agri-business and agritourism as viable economic activities in James City County.
- **ED 8.3** – Identify opportunities for non-traditional agricultural and forestal uses, agritourism and ecotourism, such as those identified in the REDC report, and evaluate obstacles to and incentives for their private sector formation and/or expansion within the County.
- **ED 8.4** – Support marketing and procurement programs for local agricultural products, including farmer's markets and agritourism and the pursuit of industries that utilize local agricultural products.
- **ED 8.5** – Identify and pursue grants and programs that support the expansion of rural economic development initiatives, including ecotourism, agritourism, historical site preservation and interpretation, aquaculture and specialty products and services, as appropriate.
- **ED 8.6** – Offer informational programs to landowners about various rural economic development opportunities that may be of interest to them as business or hobby pursuits or as alternatives to sale of lands for subdivision development.
- **ED 8.7** – Encourage local institutional and educational entities, including public schools, Colonial Williamsburg and Eastern State Hospital, to expand programs for the purchase and use of locally-grown food products.

Opportunities or Challenges:

- Quality of life
- Education
- Trained and available workforce
- cold storage
- truck parking
- workforce housing
- Ready sites
- Supportive codes and ordinances
- Incentive programs
- Water
- Utilities/ infrastructure

Mission Statements:

"James City County will support the expansion and diversification of the local economy by providing the regulatory framework to support business development, by undertaking economic development marketing and recruitment efforts, by fostering the development and expansion of businesses, and by supporting strategies to facilitate the development of affordable workforce housing. "

Goal 3: Examining and Diversifying Local Economy, 2035 Strategic Plan

"Build a diverse, balanced local economy that supports basic needs of all segments of the community and contributes positively to the quality of life."

Economic Development Goal, Towards 2035 Leading the Way Comprehensive Plan

To support the expansion and diversification of the local economy to achieve a quality community.

Overview of Economic Development Incentive Policies from the Government Finance Officers Association

http://www.gfoa.org/economic-development-incentive-policies

- The Goals and Objectives of Economic Development – Goals and measurable objectives create a context and accountability for the use of economic development incentives. Common goals used in economic development include: expansion of tax base, job creation, development of targeted economic sectors, business retention and/or recruitment blight mitigation, improving economically distressed neighborhoods, housing stock creation, and environmental/infrastructure improvements.

- Financial Incentive Tools and Limitations – An economic development incentive policy should define the types of incentives the jurisdiction is permitted to use and any limitations on their use (e.g., maximum dollar amounts, time limits, type of project that is eligible). For example, governments may choose to grant an entitlement to any firm that meets minimum qualifications, or may choose to provide incentives based on an assessment of individual firms. The policy should identify the funding sources for the incentives and ensure the use of incentives is not in conflict with the government's established fiscal policies. Governments may also establish maximum funding for a particular program.

- Evaluation Process – A clearly defined evaluation process should be outlined in an economic development policy for the purposes of consistency and transparency. Evaluation activities and factors typically include:

How a proposal measures up to the criteria a jurisdiction has established to evaluate proposals. The criteria should align with the jurisdiction's goals and objectives of economic development and policy guidance on financial incentive tools and their limitations.

A comparison of the cost of the incentive against the benefits that the project is expected to produce.

An evaluation of the impact on the tax base and revenue. This should include the impact on the tax base and revenue of the jurisdiction offering the incentive, but may also include the impact on other tax jurisdictions, especially where the incentive may have the potential to reduce the tax revenue of another jurisdiction.

Analysis of the impact of a project on existing businesses. Projects that simply shift economic activity from one area of the community to another may not represent good investments of public funds.

A determination of whether the project would proceed if the incentive were not provided. Local economic development incentives exist to induce private economic activity where it would have not otherwise occurred.

A jurisdiction may also wish to include in its policy a list of required documentation for the economic development application and the officials who are a part of the review team.

- Performance Standards – An economic development policy should require that specific performance standards, that are either quantitative or include an objective assessment that can determine if the standard is met, be established for each project receiving incentives. The policy should also outline remedies the governing board would use in the event that specific performance standards are not achieved. Performance standards help a jurisdiction gauge the effectiveness of its overall economic development program, as well as the performance of specific economic development projects. Performance standards allow jurisdictions to avoid payment of incentives for projects that do not meet the performance standards. If the proper contractual provisions are in place, performance standards could even help jurisdictions to recover the cost the incentive if the financial benefits that the incentive was predicated on do not materialize (e.g., a “clawback” provision).

- Monitoring and Compliance – A process should be established for regular monitoring of the economic development agreements adopted by the governing board and the performance of each project receiving incentives per the agreements. The policy should also identify who in the organization will be responsible for monitoring and compliance, and if multiple departments are involved, the roles and responsibilities of each department. The monitoring process should examine performance standards relative to each economic development agreement and determine whether the goals for each project are achieved within the defined timeframe. The policy should identify when the governing board will receive status updates regarding the jurisdiction’s economic development projects and related outcomes per the relevant agreements. Additionally, lessons learned during the monitoring can be used to update the jurisdiction’s policies going forward.

PART THREE
ESTABLISHING INCENTIVE GUIDELINES FOR YOUR LOCALITY

In establishing substantive incentive guidelines or policies, the locality should engage in a systematic analysis that focuses first on the expected public benefits and the cost to the locality of providing economic development incentives, then on the legal support for the incentive program and methods by which the locality's public purpose is documented and implemented and finally on the drafting of the incentive guidelines or policies. The following discussion addresses each of these steps and offers analyses based on existing law.

I. Questions to Ask Before Establishing Incentive Guidelines

A. Conceptual Questions to Ask

1. What goals does your locality wish to achieve? For example:

   - Increase number of job opportunities (increase total number of available jobs within locality vs. retention of existing job opportunities and prevention of employer relocation outside of locality)?

   - Diversify job types and types of businesses or industries (e.g. industrial, technology, service industry) and increase income level of employees?

   - Increase revenues in locality's taxes and user fees (sales tax, property taxes, business license tax, utility fees)?

   - Redevelop special areas (e.g. brownfield remediation, greyfields, eradication of abandoned or blighted areas); consistent with locality's comprehensive plan and economic development strategy?

   - Invest in land and infrastructure to benefit future economic growth?

   - Maximize the return of economic development efforts?

2. Does your locality want to support a particular type of business development?

   - Sometimes a locality wishes to encourage only particular type of development: retail, industrial, commercial, residential development, technology or others.

   - Is there a need to emphasize attracting new business vs. expansion of existing business? This raises political issues of fairness.

   - Consider concerns about preferences and giving one entity/business a competitive advantage over another.

3. How much can your locality afford financially?

4. How is your locality's economic vitality affected by the incentives offered by neighboring jurisdictions?

   - Consider the effect of competition from neighboring localities (i.e., "we have to keep up with our neighboring localities that are offering incentives in order to avoid adverse effects to the locality's economic development efforts").

5. To what extent does your locality want to audit or enforce incentive policies?

6. Will your locality want to insert claw-back provisions if the business does not produce expected results?

7. Would proposed economic development occur in your locality without an incentive?

8. Who will own the property or facilities upon which public funds are to be expended?

   - Public/Private ownership concerns

B. *Practical Questions to Ask*

1. What type of incentive to provide - grant, loan, other?

2. Should assistance be direct or indirect - utilize conduit such as IDA/EDA?

3. Is there a valid public purpose in discriminating (i) between one type of business and another and (ii) between a new business and an existing business?

4. Has the locality anticipated the potential political issues and concerns?

5. Should the incentives be paid upfront or paid out over time as reimbursement for qualifying expenditures?

6. How shall the arrangements be documented?

7. How compatible is the local IDA/EDA with the stated development objectives of the locality's governing body?

8. What is the likelihood of a successful legal challenge?

See also "A Blueprint for Elected Officials" form under "Community Assistance Tools" on page entitled "Economic Development Resources" at www.virginiaallies.org.

II. Establishing Incentive Guidelines

A. *Undertake the Legal Analysis and Develop Evidence of Public Purpose*

The Virginia Supreme Court has repeatedly reaffirmed that the stimulation and promotion of economic development is a valid public purpose. In doing so, however, the Court also has demonstrated that the mere legislative declaration that a particular program will serve a public purpose is not enough to sustain it. Despite the Court's deferential review of legislative activities, it remains the province of the Court to strike down those activities that it determines are without reasonable relation to the public interest or welfare and are beyond the scope of legitimate government. For this reason, it is essential to demonstrate that in establishing particular incentive guidelines or policies the locality can evidence its "public purpose(s)" for granting the incentive.

There are numerous ways to evaluate the cost of incentives and the commensurate public benefits that will accrue as a result of their use to demonstrate a valid public purpose. Yet, the more tangible the public benefit, the easier it will be to sustain the use of financial incentives to stimulate and promote economic and industrial development. Similarly, the more tangible and objective the evidence demonstrating a public benefit, the more likely it will be that an incentive program will be sustained as furthering a public purpose.

As the local government attorney analyzes whether proposed economic development incentive guidelines or policies will be constitutionally sustainable under Virginia law, the local government attorney may wish to apply the following analytical framework. This discussion is based on the cases and Virginia Attorney General Opinions summarized in "Part Two, The Legal Issues Surrounding the Use of Incentives."

1. *Economic Development as Valid and Animating Public Purpose.*

In keeping with the standards enunciated by the Virginia Supreme Court, the locality and the IDA/EDA should analyze the proposed financial incentives in light of their dominant or animating purpose. As described above, the locality and the IDA/EDA should make legislative findings that the proposed incentives will support economic development in the locality. These findings should further indicate that the proposed incentives are intended both to induce existing businesses to remain in the locality as well as to induce new businesses to locate in the locality. Adopting such a plan is consistent with the *Suthers* decision where the Court rejected the argument that the public purpose is served only by inducing new industry to locate in the Commonwealth:

> Public purpose may be as well served by inducing an industry whose continued existence is essential to the economy of a community to remain in this state as by inducing a new industry to enter. It is beside the point that some private interest may benefit incidentally from the action of the industrial authority in inducing an industry to remain in the state so long as such action promotes the "safety, health, welfare,

> convenience and prosperity" of the inhabitants of this Commonwealth. *Suthers*, 208 Va. at 59.

Even in *Button IV*, the one decision in which the Court found a violation of the Credit Clause, the Court reaffirmed its position that economic and industrial development is a legitimate public purpose warranting government participation: "It cannot be [disputed] that stimulation of the development of industry is a public purpose warranting governmental participation to achieve the desired objective of creating additional employment for the citizens of the State." *Button IV*, 208 Va. at 503.

In furtherance of this analysis the Court in *Button IV* intimated, however, that a transaction could pass the animating purpose test and still fail a Credit Clause challenge:

> It does not follow, however, that because the goal is meritorious, every method which might, in some way, aid its accomplishment is therefore constitutionally permissible; or, to put it another way, that because the purpose is public, anything done in furtherance thereof becomes, *a fortiori*, a proper governmental function. *Button IV*, 208 Va. at 503.

In effect, the Court suggested that a purpose could be public, but the method utilized to accomplish this public purpose might be impermissible under the Credit Clause.

The Court pointed to two factors it believed distinguished the loan guarantee program in *Button IV* from the facts of its prior decisions: (1) the lack of public ownership of the facilities on which public funds were to be expended (at least so for the period during which bonds issued to finance such facilities remained outstanding) and (2) that the debts guaranteed under the act were to "be discharged with State money from the guaranty fund upon default, are <u>otherwise unobtainable loans</u> secured from private sources by private firms to finance construction or improvement of privately owned industrial plants." The Court found that it was "difficult, if not well-nigh impossible, to say that the benefit to private interests is merely incidental or, conversely, that the benefit to the State is paramount." *Button IV*, 208 Va. at 504 (emphasis added).

While it is clear that the animating purpose test requires a case-by-case analysis to determine if the transaction or obligation undertaken by the locality or the IDA/EDA is of public benefit, the locality will need to present facts to support this effort.

2. *Specific Purposes for Use of Incentive Funds*.

In reviewing specific proposed incentives/expenditures for economic development purposes, the local government attorney can look to the history of cases, Attorney Generals opinions and other references for guidance in developing the public purpose analysis, but will find little help with specific purposes. However, in adopting the Governor's Development Opportunity Fund (Code Section 2.2-115) in 1996, the Virginia General Assembly identified certain specific purposes for which incentive funds can be used. Those purposes are found in Code Section 2.2-115(C) and are as follows:

> [P]ublic and private utility extension or capacity development on or off site; road, rail, or other transportation access cost beyond the funding capability of existing programs; site acquisition; grading, drainage, paving and any other activity required to prepare a site for construction; construction or build-out of publicly owned buildings; grants or loans to industrial development authority, housing and redevelopment authority, or other political subdivision pursuant to its duties or powers; training; or anything else permitted by law.

As referenced at the conclusion of the enumerated permissible purposes, the list is not conclusive. But the list does provide legislative authority for some of the more frequently used incentive purposes and seemingly permits additional purposes that can be qualified through legal analysis.

3. *Presumed Constitutionality of Legislative Actions*.

The detailed legislative findings of a locality and/or its IDA/EDA supporting a public purpose for their incentives should enjoy deference unless clearly wrong. In decisions addressing these constitutional issues, the Virginia Supreme Court has acknowledged the strong presumption of constitutionality that attaches to legislative actions. For example, in *Shenandoah Lime,* the Court stated that "every presumption is made in favor of the constitutionality of an act of the legislature. A reasonable doubt as to its constitutionality must be solved in favor of the validity of the law, and the courts have nothing to do with the question whether or not the legislation is wise and proper. [I]t is only in cases where the statute in question is plainly repugnant to some provision of the Constitution that the courts can declare it null and void." *Shenandoah Lime*, 115 Va. at 868-69 (quoting from *Ex Parte Settle*, 114 Va. 715, 77 S.E. 496, 497 (1913)). Even in a situation where the economic benefits expected to accrue from the proposed financial incentives may be criticized as "speculative" (similar to arguments that one might assert against the third proposed incentive), the Court has indicated that legislative findings should enjoy the deference of the courts. See *DeHaan*, 228 Va. at 590.

The Virginia Supreme Court has indicated that a similar presumption regarding the constitutionality of the actions of the Virginia General Assembly is applicable to legislative bodies at all levels of government. For example, in *La France*, the Court indicated that, in the exercise of its powers under the Act, an industrial development authority is acting in a legislative capacity and that the standard of review applicable to the exercise of such powers, therefore, is that generally applicable to legislative actions. See *La France*, 216 Va. at 281.

4. *Incidental Benefit to the Private Sector*.

The Court has consistently held that if the animating purpose is to spur economic development and private benefits are merely incidental to the primary public goal, such private benefits will not cause a constitutional problem. Further, the Court's decisions addressing the issue of private benefits have made it clear that the size or quantity of these benefits do not change their character. See *DeHaan,* 228 Va. at 588*; Coyner,* 207 Va. at 357.

One might argue that such private benefits unfairly give a competitive advantage to the recipients of the financial incentives. While the locality and the IDA/EDA should take into account such potential criticisms, the locality and the IDA/EDA should counter that such arguments are properly addressed at the legislative level and that such arguments should not jeopardize the constitutionality of the financial incentive program. See *Mayor of Lexington v. Industrial Development Authority of Rockbridge County*, 221 Va. 865, 869 (1981).

Furthermore, the locality's provision of financial incentives should demonstrate a means to achieve a public purpose that does not involve the locality and the IDA/EDA in establishing a guaranty for private business or providing a program "stamped indelibly with the purpose of granting credit in aid of private interests upon the faith of [government] funds" of the type rejected by the Court in *Button IV*. *Button* IV, 208 Va. at 503. The locality and the IDA/EDA should seek to provide incentives to private businesses not for the purpose of granting credit in their aid, but for the purpose of increasing the tax base of the locality and employment opportunities for local residents in accordance with the purposes of an industrial development authority as enunciated in the IDA Act.

Finally, the Attorney General has opined that public benefit outweighs private benefit in instances involving (a) the Commonwealth's acquisition of a private corporation's stock to benefit the state retirement system, (b) an industrial development authority's acquisition of an industrial park through the purchase of a private developer's stock, (c) a county's appropriation of funds to its industrial development authority to make a loan to a private corporation or (d) an industrial development authority's contribution to the capital of a corporation. Op. Atty Gen. Va. (May 17, 2000 Letter to Terry G. Kilgore).

One structuring factor that merits additional legal analysis is any proposal to make IDA/EDA-funded improvements to private property (on-site). In such instances, it is more likely that the IDA/EDA will not exercise much control over the facilities or the improvements. As a result, it may make the argument of merely incidental benefit more difficult to sustain. In the *Harrison II, Harrison III, Button IV* and *DeHaan* cases, the Court emphasized, without expounding in any great detail, the importance of public ownership of the facilities being financed in those cases. It did not appear to matter to the Court that in most of these cases a private party had the option of purchasing the facilities following the financing transaction and that this option often bore no relation to the market value of the facilities at the time of purchase. In these cases, the Court apparently believed that public ownership reinforced the notion of public purpose. This is not to say that public ownership is or should be an absolute requirement. One could easily imagine scenarios where the public purpose of economic development would be hindered by public ownership. Similar to the Court's finding in *Harrison III* with respect to the letting of port facilities to a private party not causing an otherwise public purpose to become a private purpose, the Court could find that private ownership of a facility similarly does not destroy the public purpose. Subsequent to the decisions in these cases the General Assembly has enacted the Governor's Development Opportunity Fund which specifically authorizes the use of public funds for certain on-site as well as off-site improvements.

5. *Summary*.

As described above, although the Virginia Supreme Court has acknowledged that economic development is a valid public purpose and will attach a strong presumption of constitutionality to a locality's particular incentive program, nevertheless a local government attorney must analyze a number of factors that collectively will affect the validity of the proposed incentives.

The following table illustrates those factors that either are more helpful or less helpful in establishing the validity of incentives under the public purpose analysis:

More Helpful	Less Helpful
Grant of existing funds	Guaranty of private debt
Funds provided from nonbinding "moral obligation" pledge; subject to annual appropriation	Funds provided by general obligation debt
Public ownership (or reversionary interest) of improvements	Privately owned improvements
Redevelopment of blighted areas	Economic development
Economic distress, high unemployment, low tax base	Strong economy
Program of enunciated criteria for grant of incentives	Case-by-case incentives
General economic benefit	Benefit to specific identified business

B. Prepare the Plan

1. *Economic Development Incentive Plan*.

(a) Locality should make legislative findings/declarations – general as to incentive guidelines or policies and specific as to incentive recipient – i.e., list public purposes underpinning incentive guidelines and policies, such as prevention of blight, needed infrastructure, job creation, increased tax base and capital investment in facilities and property.

(b) Locality should undertake economic study/impact (whether prepared internally or with outside assistance) to provide objective additional support of value of economic development incentives.

(c) Locality and IDA/EDA should formally approve economic development plan – setting forth goals and procedures and conformance with legislative findings/declarations; investment criteria; legislative findings to be made by IDA/EDA if IDA/EDA is the conduit for providing incentives.

(d) Consider having Locality and IDA/EDA enter into a Memorandum of Understanding setting forth how the IDA/EDA will implement the policies and procedures under the plan. IDA/EDA shall make findings consistent with the plan.

(e) Examples of findings to be made by the IDA/EDA under the policies and procedures may include:

(i) the animating purpose of any proposed provision of incentive grants serves a valid public purpose and only incidentally benefits private interests;

(ii) the proposed provision of incentive grants to a business is in furtherance of the purpose for which the IDA/EDA was created;

(iii) that without the stimulus of the incentive grant, it is unlikely that the business would relocate or remain in the locality; and

(iv) the grant/incentive furthers the economic development strategy of the locality.

(f) Where a locality has elected to stimulate development or redevelopment of underdeveloped, under-improved, blighted, vacant, abandoned properties or brownfields and greyfields, the following additional findings by the IDA/EDA may be appropriate:

(i) the property to be developed or redeveloped is located in an area recognized by the locality, either under its comprehensive plan or its economic development plan/strategy, as an area in need of development or redevelopment (i.e. brownfields, greyfields or vacant, abandoned or under-improved or underdeveloped property);

(ii) the proposed development or redevelopment is consistent with the locality's comprehensive plan and/or economic development plan/strategy; and

(iii) that the scope and quality of the plan will serve to influence redevelopment and additional capital investment or adjacent or nearby properties.

2. *Application Form for Business Prospect to Request Incentive Assistance*.

(a) The policies and procedures adopted by the locality (and the IDA/EDA) should require the business prospect or property owner to make formal application to the locality (or the IDA/EDA as the case may be).

(b) Application should require the business prospect or property owner to provide the following information:

(i) Description of project - company name; type of operation;

(ii) Location of project;

(iii) Amount of private investment that adds to the local tax revenues;

(iv) Jobs to be created - Average salary level or total yearly payroll of jobs to be created;

(v) Amount of incentive requested;

(vi) The purpose or purposes for which funds will be provided;

(vii) Other public funds that have been or may be expended on project; and

(viii) Summary statement presenting the importance of the project to the locality and why support is being sought. Note—in the case of redevelopment, the summary statement should include information such as:

(A) The expertise and experience of the business prospect or property owner in redeveloping brownfield, greyfields, blighted, under-improved and underdeveloped property;

(B) the degree to which the proposed project may influence development or redevelopment or adjacent or nearby properties;

(C) the extent to which the proposed project may serve to implement a change in use which is consistent with and/or furthers the goals of the locality's comprehensive plan and/or economic development plan/strategy; and

(D) and the extent to which the project incorporates mixed uses, provides open space and focuses on transportation and transit accessibility.

See also the "Project Data Sheet" form found under "Forms You Can Use" under page entitled "Economic Development Resources" at www.virginiaallies.org.

INTERNATIONAL
ECONOMIC DEVELOPMENT
COUNCIL

The Power of Knowledge and Leadership

The Power and Possibility of Opportunity Zones

Jane Campbell and Timothy Lee

October 30, 2018

The Path to Passage

- The Tax Cuts and Jobs Act (H.R. 1) was signed into law by President Trump on December 22, 2017.
- The sweeping tax overhaul legislation included provisions from S. 293, the Investing in Opportunity Act
- Original Opportunity Zones legislation sponsored by Sen. Tim Scott (R-SC); originally co-sponsored by Sen. Cory Booker (D-NJ)
- House of Representatives counterpart, H.R. 828, sponsored by Reps. Pat Tiberi (R-WI) and Ron Kind (D-WI)
- Bipartisan support
  - 14 Senate co-sponsors
  - 81 House co-sponsors

Opportunity Zones Tax Incentives

Opportunity Zones offer investors three incentives for putting their capital to work in economically distressed communities:

Temporary Deferral

A **temporary deferral:** An investor can defer capital gains taxes until the end of 2026 by rolling their gains directly over into an Opportunity Fund.

Step-Up In Basis

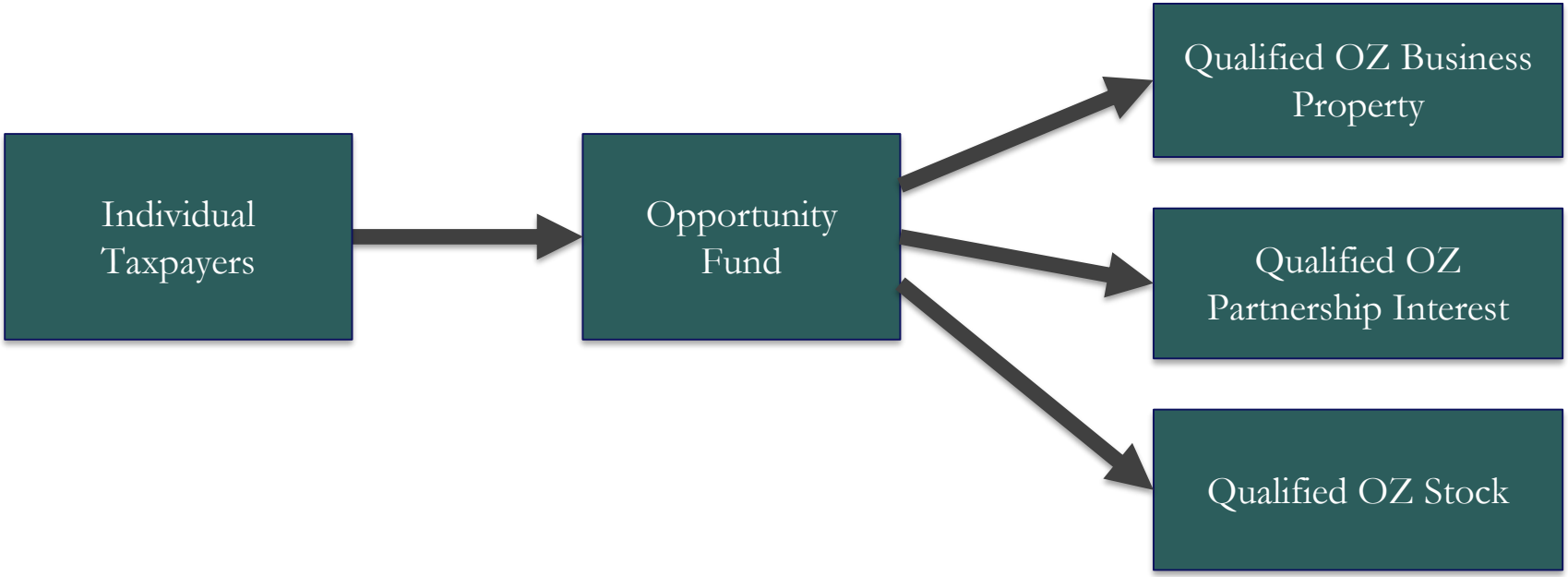
A **tax liability reduction:** The deferred capital gains liability is effectively reduced by 10% if the investment in the Opportunity Fund is held for 5 years and another 5% if held for 7 years.

Permanent Exclusion

A **tax exemption:** Any capital gains on subsequent investments made through an Opportunity Fund accrue tax-free as long as the investor stays invested in the fund for at least 10 years.

Graphics courtesy of Economic Innovation Group

Mechanics of Opportunity Zone Investments



Opportunity Zones In Practice

There are three major components to Opportunity Zones:

Investments:
Opportunity Funds make equity investments in businesses and business property in Opportunity Zones.

Funds:
Opportunity Funds are investment vehicles organized as corporations or partnerships for the specific purpose of investing in qualified Opportunity Zones.

Zones:
States and territories nominated 25% of their eligible low-income census tracts as Opportunity Zones. Treasury approved final map.

Assets Eligible for Opportunity Zone Investments

There are three types of property eligible for Opportunity Zone investment:

Stock of a qualified Opportunity Zone **corporation**

Partnership interest in a qualified Opportunity Zone partnership

Business property used in qualified Opportunity Zones

- A qualified Opportunity Zone business must use **"substantially all"** of its tangible property within a zone and meet a few additional basic tests***. Treasury just released draft regulations setting the "substantially all" test at 70% of the basis of the building itself excluding the cost of land***
- Investments that **do not** qualify include funds of funds, "sin" businesses (e.g. golf courses, package stores, casinos), and financial institutions
- A **substantial improvement** test applies unless the business property is original use

Investment Impact of Opportunity Zones

The early movers are seeking to shape the future of Opportunity Zone investing, and with it the character of neighborhood and community development in the U.S. for at least the next decade.

-Dennis Pierce, ImpactAlpha, "Early Movers are Getting a Jump on Opportunity Zones – and the Future of Community Investing"

- Deferral of capital gains taxation affords Opportunity Zone investors larger investments upfront
- Basis step-up explicitly reduces deferred taxation of invested capital gains, rewarding long-term commitment to Opportunity Zone communities
- Capital gains tax on investment returns eliminated entirely for 10-year investors

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INVESTMENT NEWS FOR A SUSTAINABLE EDGE

Features | Themes | Community |

Inclusive Economy | July 18, 2018

Early movers are getting a jump on opportunity zones – and the future of community investing

Opportunity Zone Investment: A Simplified Example (1)

December 2018

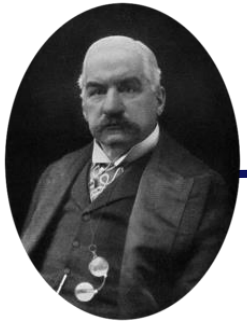
Opportunity Zone: Offers deferral of federal tax on realized capital gains, plus elimination of taxes on returns to OZ investments held for 10 years

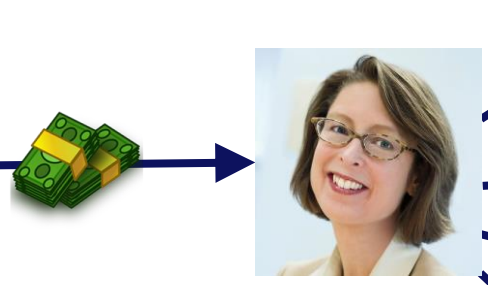
Investor: Buys 10 shares of technology stock at 100; sells at 200. Realizes capital gain of $1,000. Two options: Pay federal income tax today, or invest in Opportunity Zone.

Capital Gains Tax: Federal law provides for up to 23.8% tax on long-term capital gains. Many states levy additional capital gains taxes.

Opportunity Zone Investment: A Simplified Example (2)

December 2018-December 2028



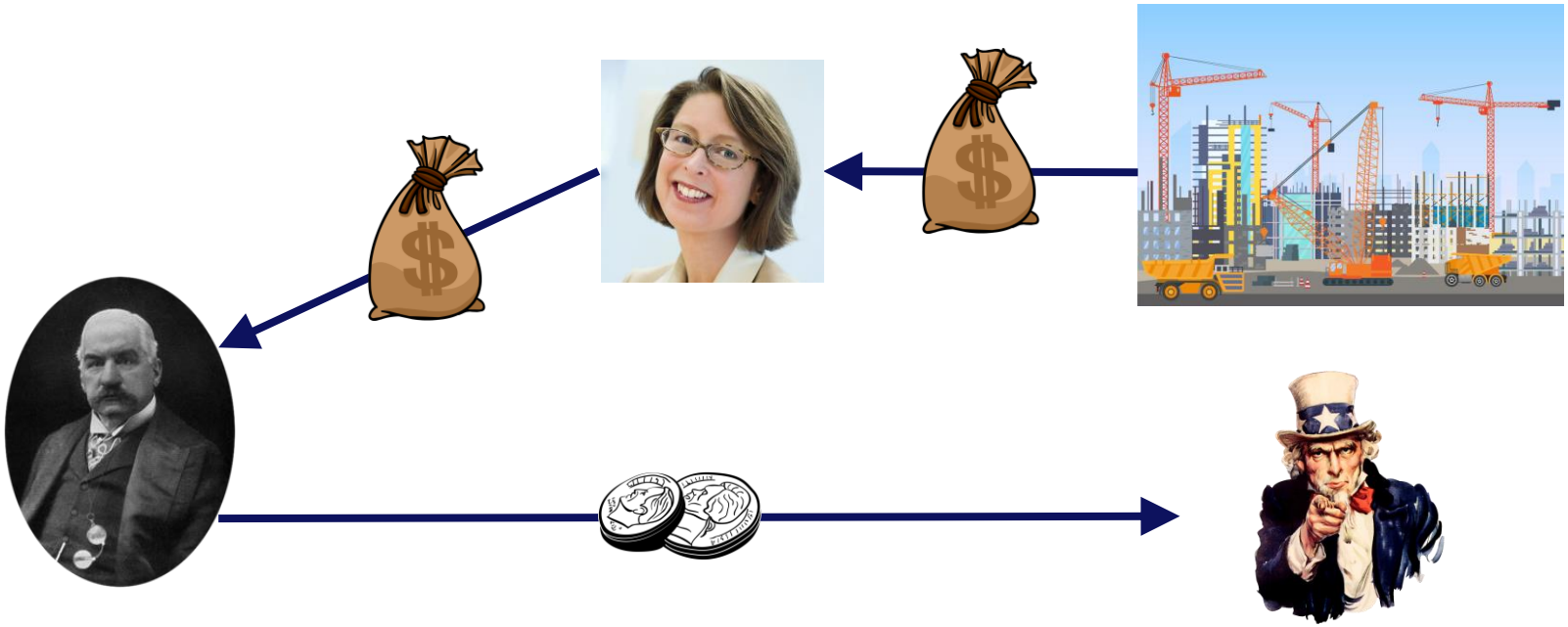


Investor: Contributes $1,000 in realized capital gains, otherwise taxable, into a qualified Opportunity Fund.

Fund Manager: Pools contributed funds from multiple investors and invests in equity, real estate, and equipment in businesses and housing located in Opportunity Zones

Opportunity Zone Investment: A Simplified Example (3)

December 2028

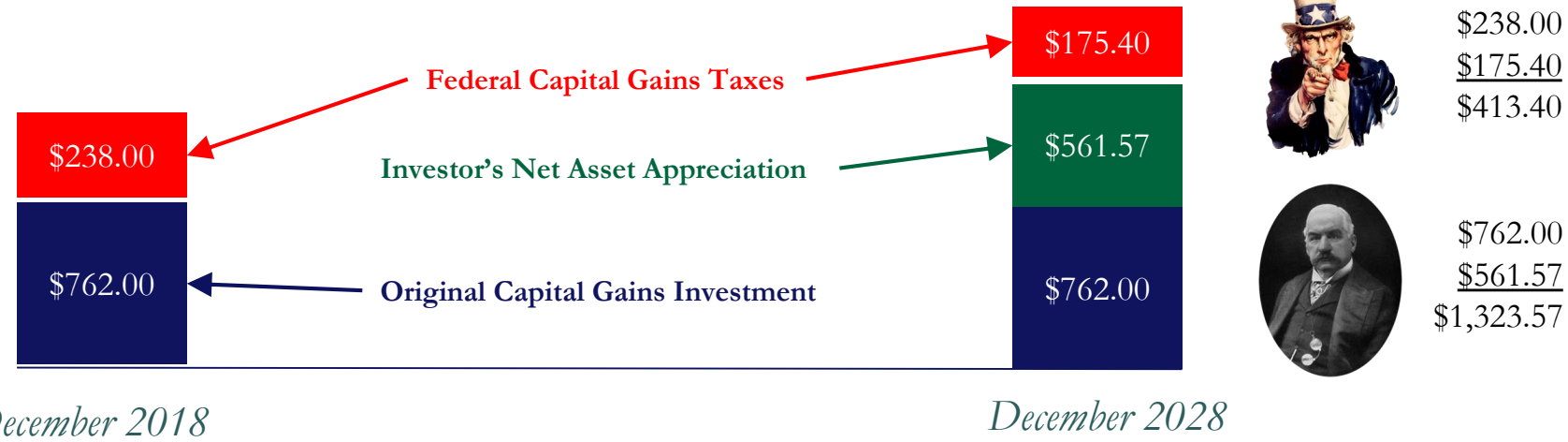


Investor: Has held Opportunity Fund investment for 10 years.

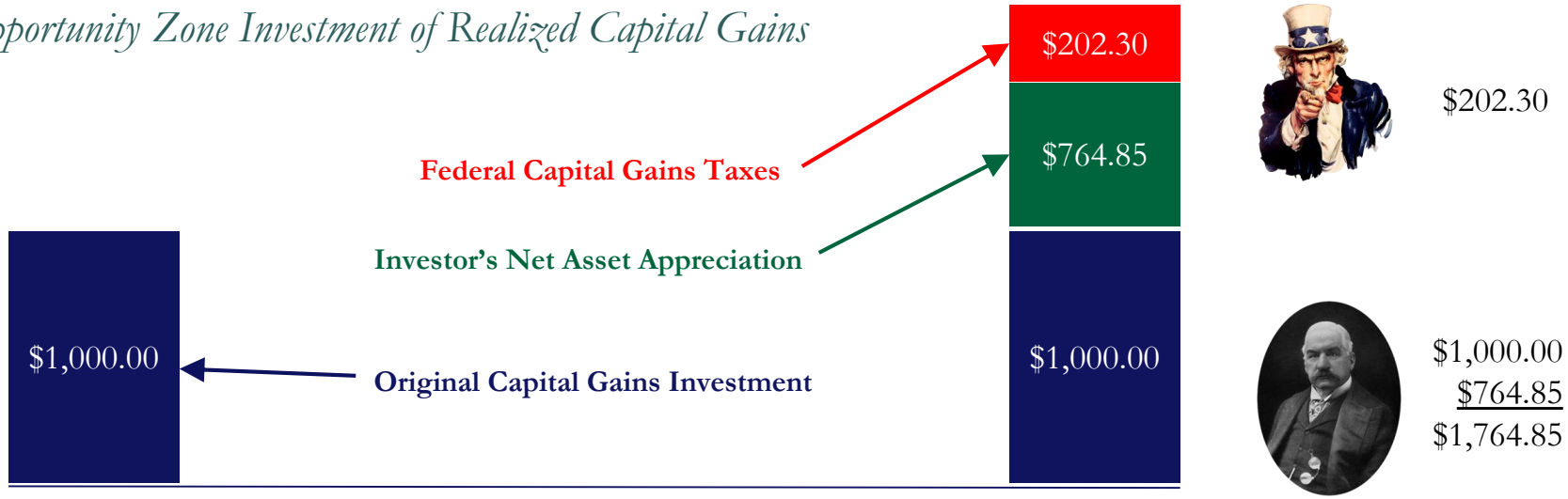
- Completely exempt from capital gains tax on appreciation of Opportunity Zone holding
- Entitled to 15% basis step-up on deferred capital gains tax of original investment; tax liability deferred until end of 2026

Opportunity Zone Investment: A Simplified Example (4)

Non-Opportunity Zone Investment of Realized Capital Gains



Opportunity Zone Investment of Realized Capital Gains



Graphics not to scale.

Impact Analysis of Opportunity Zone Provisions

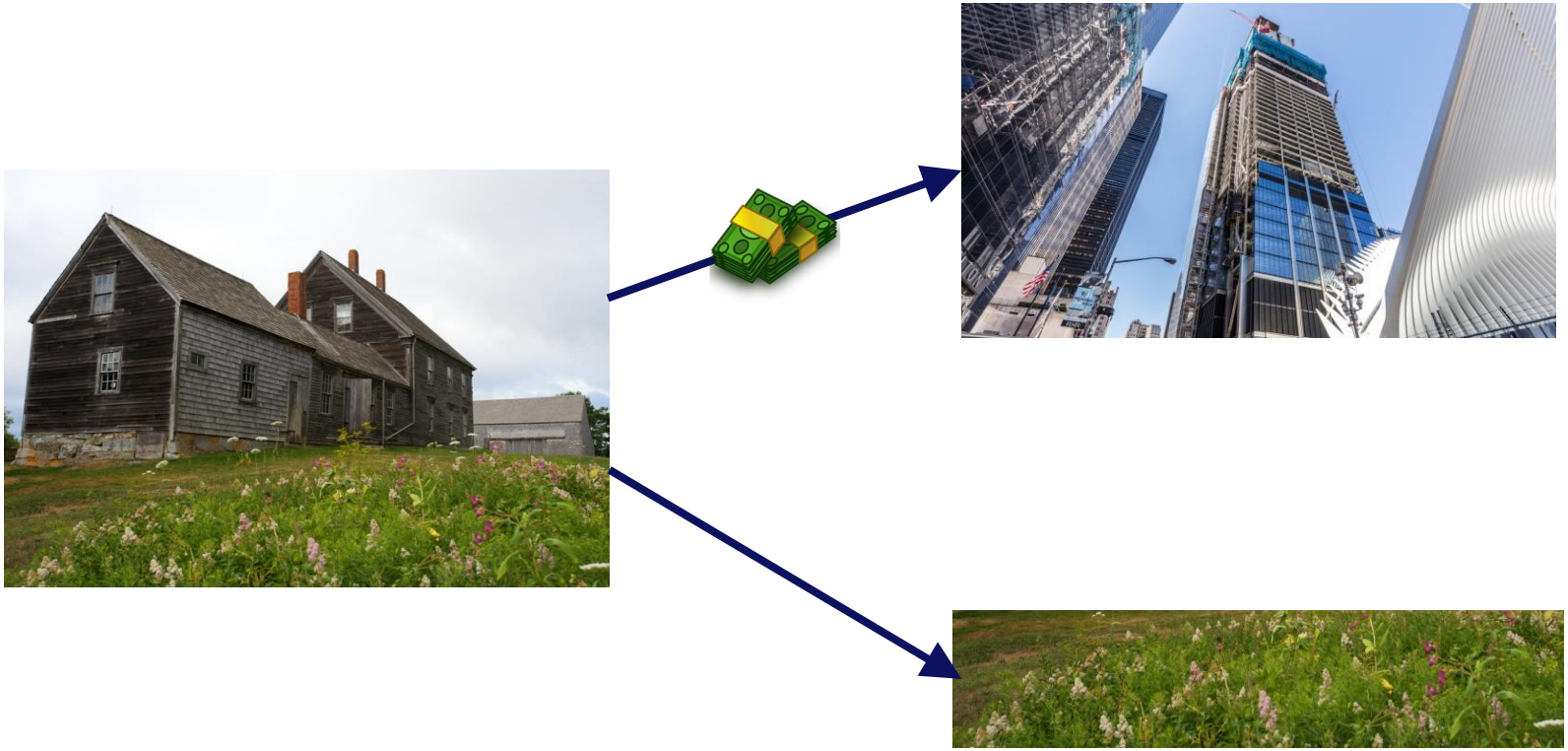
	Capital Gains	Basis Step-Up	Initial Tax Load	Net Invested Funds	Gross Value of Investment at End of Holding Period, 7.0% Annual Return	Gross Return on Invested Funds	Tax Load on Gross Return, End of Holding Period	Deferred Tax Load on Original Invested Funds	Cumulative Tax Load	Net Return on Invested Funds	Net Investment Value after Holding Period
Non QOZ	$ 1,000.00	0%	$ 238.00	$ 762.00	$ 1,068.74	$ 306.74	$ 73.01		$ 311.01	$ 233.74	$ 995.74
QOZ, 5 Yr Holding Period	$ 1,000.00	10%	$ -	$ 1,000.00	$ 1,402.55	$ 402.55	$ 95.81	$ 214.20	$ 310.01	$ 92.54	$ 1,092.54
							Cumulative Difference in Net Investment Returns				**$ 96.81**
Non QOZ	$ 1,000.00	0%	$ 238.00	$ 762.00	$ 1,223.61	$ 461.61	$ 109.86		$ 347.86	$ 351.74	$ 1,113.74
QOZ, 7 Yr Holding Period	$ 1,000.00	15%	$ -	$ 1,000.00	$ 1,605.78	$ 605.78	$ 144.18	$ 202.30	$ 346.48	$ 259.31	$ 1,259.31
							Cumulative Difference in Net Investment Returns				**$ 145.56**
Non QOZ	$ 1,000.00	0%	$ 238.00	$ 762.00	$ 1,498.97	$ 736.97	$ 175.40		$ 413.40	$ 561.57	$ 1,323.57
QOZ, 10 Yr Holding Period	$ 1,000.00	15%	$ -	$ 1,000.00	$ 1,967.15	$ 967.15	$ -	$ 202.30	$ 202.30	$ 764.85	$ 1,764.85
							Cumulative Difference in Net Investment Returns				**$ 441.28**

Treasury Department Latest Guidance

- Treasury Department released a long-awaited first round of guidance on implementation of Opportunity Zone provisions on October 19, 2018. It is available at https://www.irs.gov/pub/irs-drop/reg-115420-18.pdf.
- The comment period on this round of guidance is open until December 28, 2018. Comments can be submitted at https://www.federalregister.gov/documents/2018/10/29/2018-23382/investing-in-qualified-opportunity-funds.

Land and Buildings

- Land does not require substantial improvement, but buildings do
- "Substantial improvement" is investment that meets or exceeds the cost basis of the buildings (excluding the land)



'Substantially All' Threshold

- **90%** of the assets of any Opportunity Fund must be situated in Opportunity Zones or invested in Opportunity Zone businesses.
- Qualified Opportunity Zone businesses must have **"substantially all"** of their tangible property located within an opportunity zone.
- According to the new guidance, **"substantially all"** is defined as **"at least 70%"** for determining whether substantially all of the tangible property owned or lease by a taxpayer is qualified opportunity zone business property (as defined under section 1400Z-2(d)(3)(A)(i)).

Opportunity Fund Self-Certification

Opportunity Funds will self-certify their compliance with applicable requirements using IRS Form 8996.

Form **8996**
(December 2018)
Department of the Treasury
Internal Revenue Service

Qualified Opportunity Fund
► Go to *www.irs.gov/Form8996* for the latest information.
► Attach to your tax return. See instructions.

OMB No. 1545-0123
Attachment Sequence No. **996**

Name | Employer identification number

Part I **General Information and Certification**

1 Type of taxpayer: ☐ Corporation ☐ Partnership
2 Is the taxpayer organized for the purpose of investing in qualified opportunity zone property (other than another qualified opportunity fund)?
☐ **No. STOP.** Do not file this form with your tax return.
☐ **Yes.** Go to line 3.
3 Is this the first period the taxpayer is a Qualified Opportunity Fund?
☐ **Yes.** By checking this box, you certify that by the end of the taxpayer's first qualified opportunity fund year, the taxpayer's organizing documents include a statement of the entity's purpose of investing in qualified opportunity zone property and the description of the qualified opportunity zone business. See instructions.
☐ **No.** Go to Part II.
4 If "Yes" on line 3, list the first month in which the fund chooses to be a Qualified Opportunity Fund.

Part II **Investment Standard Calculation**

5 Total qualified opportunity zone property held by the taxpayer on the last day of the first 6-month period of the taxpayer's tax year. See instructions if Part I, line 3 is "Yes"	5	
6 Total assets held by the taxpayer on the last day of the first 6-month period of the taxpayer's tax year. See instructions if Part I, line 3 is "Yes"	6	
7 Divide line 5 by line 6	7	
8 Total qualified opportunity zone property held by the taxpayer on the last day of the taxpaye's tax year	8	
9 Total assets held by the taxpayer on the last day of the taxpayer's tax year	9	
10 Divide line 8 by line 9	10	

Part III **Qualified Opportunity Fund Average and Penalty**

11 Add lines 7 and 10	11	
12 Divide line 11 by 2.0. See instructions if Part I, line 3 is "Yes"	12	
13 Is line 12 equal to or more than .90? ☐ **Yes.** Enter -0- on this line and file this form with your tax return. ☐ **No.** The fund has failed to maintain the investment standard. Complete Part IV to figure the penalty. Enter the penalty from line 8 of Part IV on this line, and file this form with your tax return	13	

Cat. No. 37820G Form **8996** (12-2018)

Form 8996 (12-2018) Page **2**

Part IV **Line 13 Penalty**

If you checked "No" in Part III, line 13 complete Part IV to figure the penalty. Enter the number from line 8 below on Part III, line 13. See instructions if Part I, line 3 is "Yes."

	(a) Month 1	(b) Month 2	(c) Month 3	(d) Month 4	(e) Month 5
1 Total assets on the last day of the month					
2 Multiply line 1 by .90					
3 Total Qualified Opportunity Zone Property on the last day of the month					
4 Subtract line 3 from line 2. If less than zero, enter -0-					
5 Underpayment rate					
6 Multiply line 4 by line 5					
7 Divide line 6 by 12.0. Round up to two decimal places. See instructions if Part I, line 3 is "Yes"					

	(f) Month 6	(g) Month 7	(h) Month 8	(i) Month 9	(j) Month 10	(k) Month 11	(l) Month 12
1							
2							
3							
4							
5							
6							
7							

8 **Penalty.** Add columns (a) through (l) of line 7. Enter the total here and on Part III, line 13 $

Form **8996** (12-2018)

DRAFT AS OF October 19, 2018 DO NOT FILE

Opportunity Fund Organizational Structure

- Qualified Opportunity Funds can be:
  - LLCs
  - Partnerships
  - Corporations.
- Taxpayers eligible to elect deferral under section 1400Z-2 ("gain deferral election") are those that recognize capital gain for federal income tax purposes. These taxpayers include:
  - Individuals
  - C corporations (including Regulated Investment Companies and Real Estate Investment Trusts)
  - Partnerships, and
  - Certain other pass-through entities.

Working Capital Safe Harbor

The safe harbor allows qualified opportunity zone businesses to apply the definition of working capital provided in section 1397C(e)(1) to property held by the business for a period of up to **31 months**, if three requirements are met:

1. There is a **written plan** that identifies the working capital assets as property held for the acquisition, construction, or substantial improvement of tangible property in the opportunity zone
2. There is a written schedule consistent with the ordinary start-up of a trade or business for the expenditure of the working capital assets, and under that schedule, the **working capital assets are spent within 31 months of the receipt by the business** of the financial property
3. The working capital assets are actually used in a manner that is **substantially consistent with the schedule**.

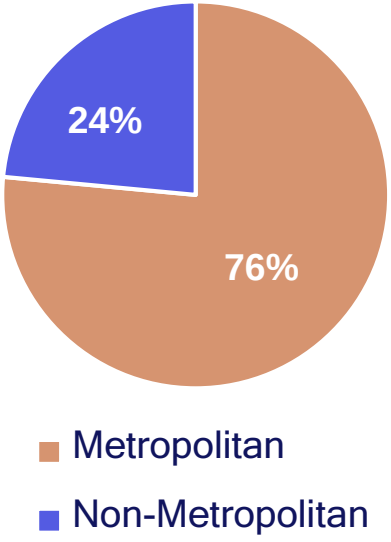
Key Features of Opportunity Zones

- ✓ **Flexibility:** Low income communities come in many different shapes and sizes. All have different needs. This tool is capable of supporting a variety of mutually reinforcing activities within the same community
- ✓ **Scalability:** There is no statutory cap on the amount of capital that can flow into Opportunity Zones in any given year. As such, this tool has the potential to help fuel economic renewal on a national scale
- ✓ **Simplicity:** Opportunity funds do not compete for fixed allocations of public-sector financing, and as a result do not require pre-approval of their investments. This should lower the cost, time and risk to business transactions, and encourage broad participation

Opportunity Zones Across The United States

- Of the 74,134 census tracts in the US and its territories, 8,762 (11.8%) have been designated as Opportunity Zones
- Opportunity Zones are now designated for 10 years
- Opportunity Zones (indicated in dark blue) are both urban and rural
  - Urban areas are less visible on the map, but very much part of the QOZ initiative
  - For example, the city of Chicago alone has 133 QOZs
- The Treasury Department's CDFI Fund has published a complete list of Opportunity Zones at https://www.cdfifund.gov/pages/opportunity-zones.aspx

Profile of America's Opportunity Zones



¾ of Opportunity Zones lie within metro areas

31.3 million residents
(35.0 million including Puerto Rico and other US territories)

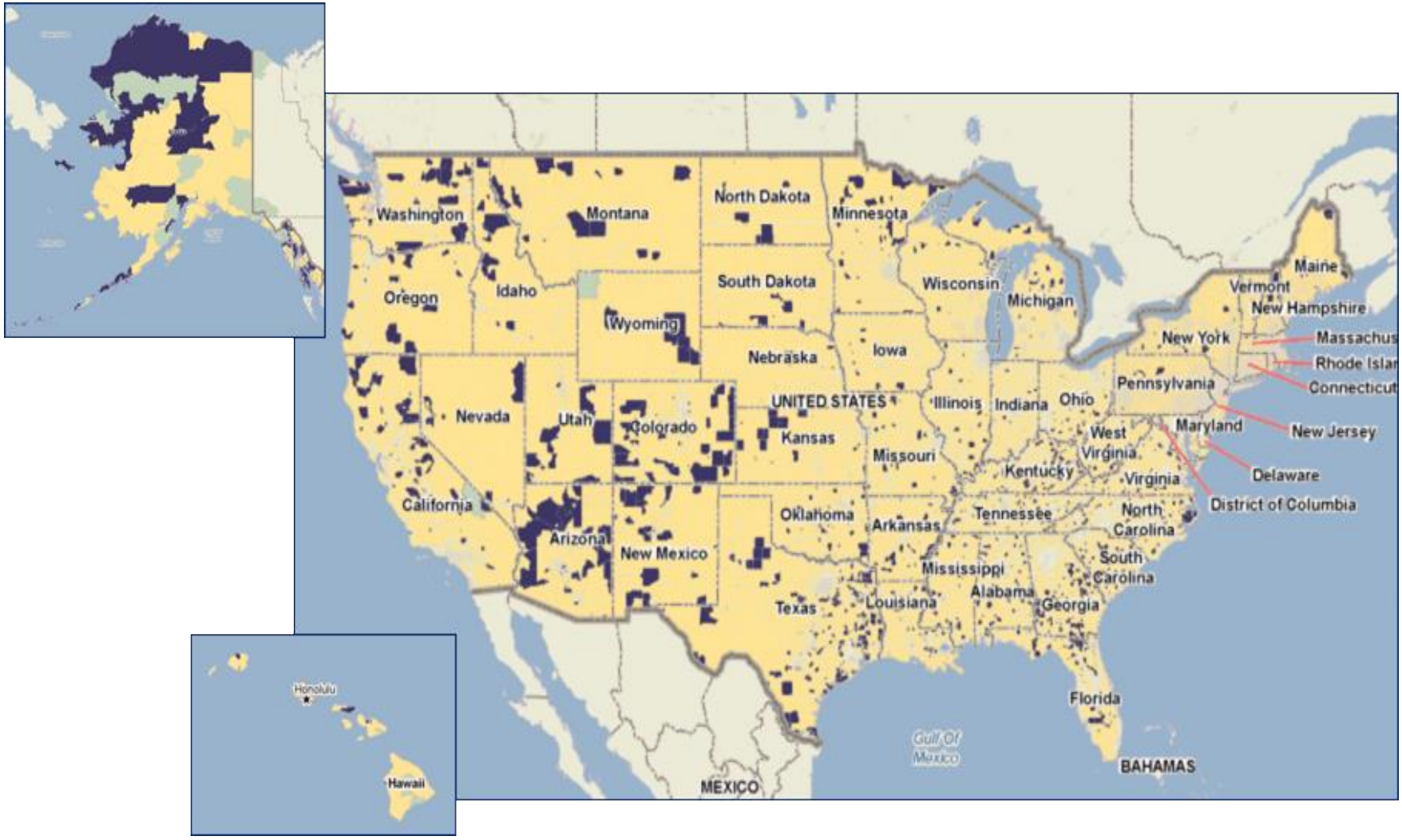
10 percent of the nation's population resides within an Opportunity Zone

1.6 million businesses

24 million jobs

A strong foundation of businesses and jobs on which to expand

Opportunity Zones Across The United States



Map provided by US Department of the Treasury.

Opportunity Zones Investment Strategy for Distressed Communities

This is the moment for local leadership. The map is set. It is time to mobilize in the Opportunity Zones.

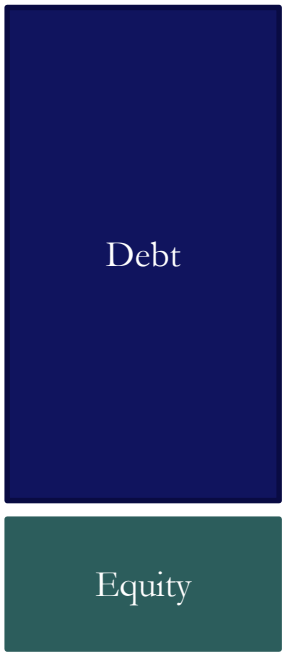
- State and local governments can lead by:
  - Convening stakeholders and key constituencies, including anchor institutions
  - Engage the local community to determine its needs and develop an investment plan for the zone
  - Promoting inclusive and equitable economic growth for existing residents and businesses by aligning existing incentives and infrastructure investments in support of expanding access to opportunity
  - Implementing protections that prevent displacement
  - Incentivizing investments geared toward high social benefit

Community Development Policy Tools

Tax Credits	Debt Financing	Community Targeting
• Low Income Housing • New Markets	• Tax Exempt Capital Markets • Federal Credit Programs: HUD, USDA	• Opportunity Zones • HUBZones • Disaster Areas • Other Criteria

Complementary Roles: Debt and Equity

- Opportunity Zones can be part of an integrated, holistic approach to boot-strapping community development investment
- Opportunity Zone boost to equity investment complements existing incentives on the debt side, including federal credit programs (e.g. HUD, USDA) and tax-exempt capital markets
- Guidance specifically states Opportunity Zones should complement, not replace, other initiatives



Key Tools for Local Governments

- ✓ **Land use:** Address land use zoning as a means to protect/preserve affordable "commercial workspaces and locations"
- ✓ **Planning:** Local governments' proactive participation in negotiating redevelopment plans designed to prevent displacement of micro- and/or small businesses
- ✓ **Knowledge:** Conduct economic impact assessments that measure the value of business services to a city's resident base
- ✓ **Social Impact:** Small businesses are often more than service providers: they are social supports, particularly for lower-income communities
- ✓ **Incentives and Community Investment:** Economic incentives from Tax Increment Financing, Community Development Block Grant investment, infrastructure development, workforce training, and others contribute to creating stronger communities

How Are Things Likely To Proceed From Here?

2018

- ✓ Opportunity Zones certified and final map in place
- ✓ Q3-Q4: Early mover funds form and capitalize
- ✓ Q4: IRS/Treasury release further guidance
- Q4: IRS released Opportunity Fund self-certification form

2019

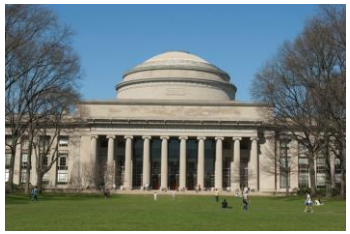
- Bulk of funds form and capitalize
- Investment starts to flow

2020 and 2021

- Funds begin to invest at scale
- Funds reach 90 percent thresholds
- Investors continue to pile on in advance of the 2021 deadline to get the 5-year step-up by 2026
- First real picture of impact takes shape

A Holistic Approach to Success

Community Members and NGOs



Local Institutions

Institutional Investors

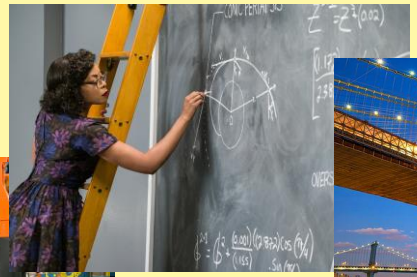
States and Localities

Federal Government

Housing

Small Businesses

Large Businesses



Education

Infrastructure

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International Economic Development Council
Webinar: The Power and Promise of Opportunity Zones
October 30, 2018
Jane Campbell, Senior Fellow IEDC, Jane Campbell Strategies
Timothy Lee, Senior Vice President, Signet Partners Inc.
Follow-Up Questions and Answers

Q. Is the capital gains tax rate frozen at 2018 levels (i.e. when the investment is made), or do investors pay the tax rate in effect at time of actual or deemed disposition (e.g. year-end 2026)?

A. The applicable capital gains rate is that at the time of disposition (actual or deemed).

Q. Does the investment have to be private funds? Can a public economic development organization be an investor in Opportunity Funds? Can foreign investment be utilized? What if I, a US taxpayer, invest non-capital gains money in an Opportunity Zone?

A. The tax incentive only applies to investments made from capital gains, so the taxpayer must owe capital gains in order to benefit. No other investments in an Opportunity Zone project will earn the tax benefits.

Q. In states that couple state tax policy to federal tax policy, do the deferrals/reductions/ exemptions apply to state capital gains tax rates?

A. State legislatures will make state tax policy decisions. Many states conform to federal tax policy, but many do not. Check with your own state.

Q. If a project is developed four years from now, will it only have six years of tax deferral benefit? Can you confirm that Opportunity Funds do not have to be pulled out of the project after 10 years or 2026, and that instead the basis is just readjusted?

A. The law as passed requires that the deferred capital gains tax is due on December 31, 2026. Thus, in order to earn the maximum basis reduction of 15%, investments would have to be in place by December 31, 2019.

The requirement to pay the deferred tax does not mean that the investment must be sold. The proposed regulations clarify that there is no time limit on how long Opportunity Zone investments can be held and that earnings on the investment – if made through a Qualified Opportunity Fund – will be exempt from capital gains tax if held for 10 years if the investment is made before December 2026, when the law sunsets. There is no requirement to sell the property, just to pay the deferred capital gains tax.

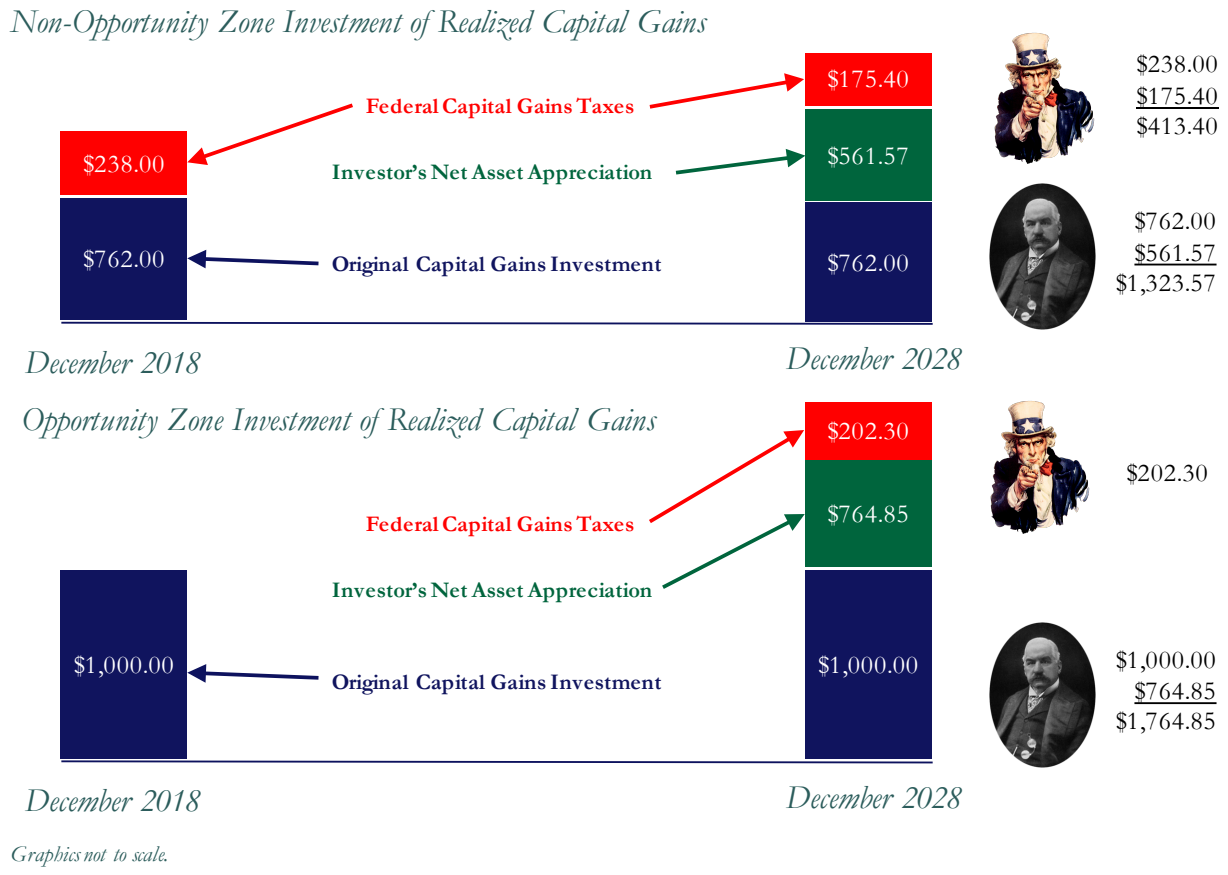
Finally, the proposed regulations create a working capital provision, recognizing that projects take time to be executed. Qualified Opportunity Funds can report investments in Opportunity Zones property even if the funds are not expended as long as there is a written plan for expenditures over 31 months or less and that plan is substantially followed.

Q. What determines the "investor's net asset appreciation"? How are gains realized by Opportunity Zone investors, and what constitutes a project that is viable in terms of return on investment rates?

A. On slide 11 of our original deck (reprinted below), "investor's net asset appreciation" indicates the increase in value of the investor's holdings after tax obligations are met – i.e. how much she actually made at day's end.

Opportunity Zone investors will realize gains through respective stakes in their Opportunity Fund, which in turn (in a best-case scenario) will benefit both from ordinary income and capital gains on their Opportunity Zone businesses, real estate, and other investments.

Because Opportunity Funds are funded investments of capital gains, investors will probably seek *after-tax* returns on investment comparable to assets without such favorable tax treatment. For example, they may be willing to accept a somewhat lower *nominal* rate of return on a new apartment building, knowing that their Opportunity Zone incentives will boost prospective all-in returns to match those available to non-Opportunity Zone investors in another building down the street.



Graphics not to scale.

Q. Who is the typical investor who would benefit from this capital gain tax benefit?

A. The investors who owe capital gains tax are the key market – including high net worth individuals and real estate partnerships.

Q. Can an individual invest in his or her own project or property? How about a corporation that will then invest in that individual's properties? Can a bank holding fund have a vested interest in the property? Are prospective owners of property located in Opportunity Zones excluded from investing in Opportunity Funds with assets therein? For example, can an investor purchase property upon completion of improvements?

A. Opportunity Zone investments must be purchased from unrelated parties in order to qualify for the tax preference. In the governing law (Internal Revenue Code, 26 USC 1400Z-2 (e)(2)) a related party controls 20% or more of the potential investment. The related party rules apply to any kind of investor.

Q. Is the 70% threshold for "substantially all" determined by the property's appraised value or total dollars spent?

A. There are two issues at work here. First, Opportunity Funds are required to invest 90% of their funds in qualified Opportunity Zone property. Each such fund must certify this level of investment every six months. Second, qualified Opportunity Zone businesses must have at least 70% of their tangible property in an Opportunity Zone. Valuations of tangible property must conform to those in financial reports submitted for tax filings, or cost basis if that is not applicable.

The other issue addressed in the regulations is real estate improvement. The rules require a "substantial improvement" be made to property. In this round of regulations, Treasury indicated that the "substantial improvement" test for a real estate investment would be 100% of the original basis of the property minus the cost of the land (i.e. the cost of the building).

Q. Could an economic development organization, city government, or foundation set up or manage an Opportunity Fund? Can cities or other government entities establish Opportunity Funds to invest in properties? Are place-based nonprofits like CDCs creating targeted Opportunity Funds to invest in specific geographies?

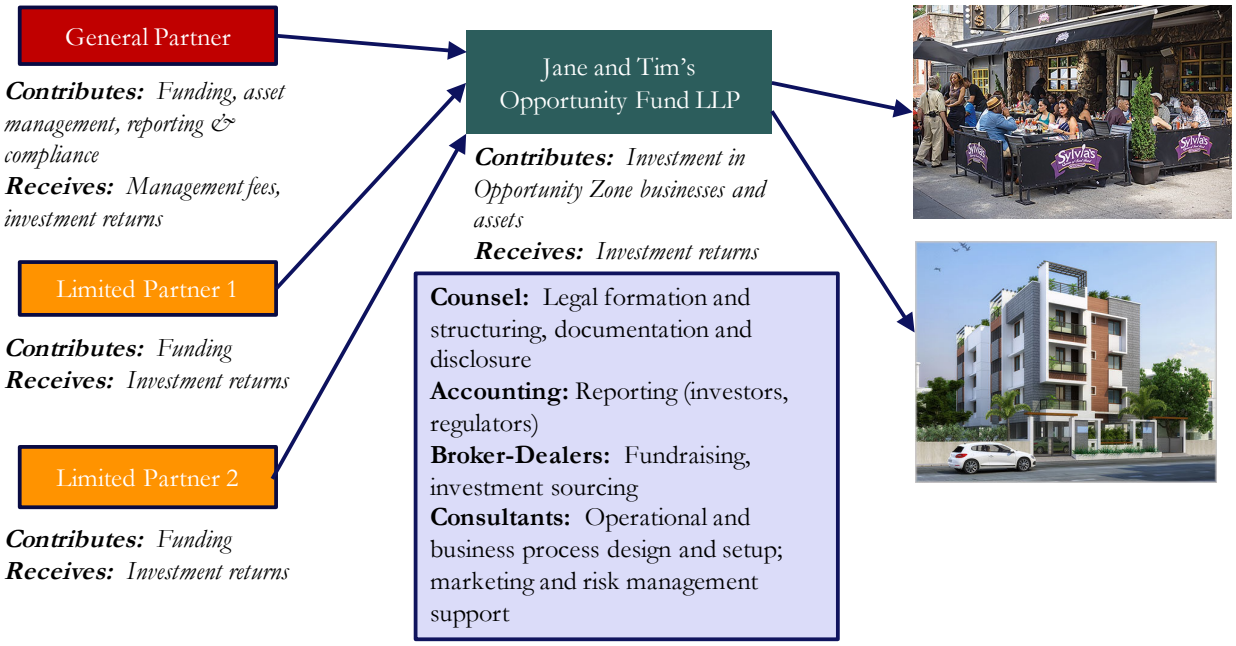
A. According to the Treasury Department, "the proposed regulations generally permit any taxpayer that is a corporation or partnership for tax purposes to self-certify as a QOF." That appears to implicitly exclude tax-exempt organizations. However, economic development entities and local governments can partner with corporations or partnerships to establish and support Opportunity Funds.

Q. Does the fund have to exist prior to the equity investment?

A. In order to qualify as a Qualified Opportunity Zone Investment the equity investment must be made through a Qualified Opportunity Fund. The Treasury guidance specifies that pre-existing entities may become Opportunity Funds. However, only certain investors (i.e. US taxpayers investing realized capital gains) may enjoy Opportunity Fund tax benefits. Existing funds will need the capacity to designate and track such investors and their assets.

Q. How do you set up an Opportunity Fund? Who would be a typical partner in a community to create the fund? Existing investment brokers? Local attorneys? Developers?

A. Below is a *simplified* example diagram of an Opportunity Fund, structured as an investment partnership. This is only one possible fund structure of many permissible options. With respect to formal partners, we indicate likely service providers as well as investors.



Q. Can tribal entities use Opportunity Funds for qualified investment projects?

A. Yes. Both Arizona and the State of Washington intentionally engaged tribal leaders in the Opportunity Zone designation.

Q. Could you comment on the potential investment advice liabilities associated with being an Opportunity Fund?

A. In broad terms, we expect that Opportunity Fund managers will have to meet regulatory requirements that apply to similarly situated fund managers, whether or not registered, with respect to disclosure, fiduciary duties, and investor reporting. Additionally, aside from regulatory mandates, they are also likely to be required to meet industry norms for investor transparency and responsiveness in order to attract funding.

Q. Can the lead investor in an Opportunity Fund also be the fund manager? Who makes the decision on an Opportunity Fund investment? How does someone become an Opportunity Fund manager and what are their qualifications?

A. While the law does not outline qualifications for fund managers, we expect that in many cases the lead investor or general partner (or an affiliate) will serve as fund manager, with the authority to make investment decisions for the fund. The industry is likely to use familiar, proven fund formation templates that exist. As a business matter, we believe that the most successful Opportunity Fund managers will be those that can point to a track record in both (a) management of relevant assets (e.g. small consumer retailers, Middle West multifamily real estate) and (b) local, mission-oriented community development.

Q. Can the 10% of Opportunity Fund assets over and above the 90% asset test be used to pay the fund manager?

A. The 10% not invested in Qualified OZ property can include funds awaiting investment and operating costs, which would include payments to fund managers. We believe investors will be judicious about management fees and seek high quality and low cost management with transparency in reporting.

Q. Is there only one fund manager per Opportunity Zone? Can there be more than one fund manager per property in an Opportunity Zone?

A. There is no formal limit on the number of Opportunity Funds or managers that can invest in any individual Opportunity Zone, or any single business or project therein. For example, two or three separate Opportunity Funds could each obtain equity stakes in an Opportunity Zone business.

Q. We have been approached about a collaborative/multi-state fund. Is it best to form separate funds or pool multiple projects across states?

A. Each approach has merits, and in fact we expect that the long-term Opportunity Fund ecosystem will include both types of funds. Some investors in the space will seek diversification by region, industry and other key characteristics. Others will appreciate the opportunity to invest selectively in specific areas or industries according to their judgment, or simply to participate in the economic renewal of their hometowns. Notably, fund of fund vehicles are prohibited under the Opportunity Fund legislation, so diversified Opportunity Funds will need to make their own investments directly.

The timelines in the law require that capital gains earnings be invested within 180 days of realization and that Opportunity Funds invest the funds within 180 days of receipt into the fund. Thus, successful Opportunity Zone investments will require a healthy pipeline of projects and of investors with the ability to match investors and projects quickly. This need may drive creation of multiple smaller funds for each project.

Q. What is the role of an economic development pro in an Opportunity Zone? How do we as local economic development professionals connect to Opportunity Fund managers to pitch projects? How do we help our own Opportunity Zones stand apart and market them? What are your suggestions for promoting investments in your Opportunity Zones to existing Funds? What role can cities play to use Opportunity Funds or take advantage of Opportunity Zones in their communities? If an economic development authority owns property, how can it attract an Opportunity Fund investor to participate in its site development? Are investors selecting Opportunity Zones and projects to invest in? Should the Opportunity Zone project be well-defined before seeking investment, or should localities pursue investors before pitching ideas to developers?

A. Clear planning for individual Opportunity Zones will make them stand out. Economic development pros are ideally positioned to tell their area's investment "story", highlighting both needs and potential. They can also work with local officials to bring companion investment in housing, infrastructure and schools. Communities can also bring other debt related incentives such as Low Income Housing Tax Credits, New Markets Tax Credits, tax increment financing to a deal.

Additionally, investing in robust data collection and analytics will be exceptionally valuable in making investor assessments easier and more insightful, supporting effective risk management, and promoting transparency to prospective investors (both Opportunity Zone equity investors and companion investors such as municipal bond buyers or federal credit program participants).

We are confident that the ability to tell a unique, authoritative, and well-researched local "story" and a holistic, community-based approach to making local public investments while soliciting private investment will prove, over time, to be most successful.

Q. If an Opportunity Fund invests in property, is there a requirement to develop that property within a certain time period?

A. An Opportunity Zone real estate asset must be either (a) original use (i.e. a new building) or (b) "substantially improved" via investment in renovation and improvement that exceeds the building's original cost basis. The working capital safe harbor detailed under Treasury's guidance allows Opportunity Zone benefits for funds spent on such renovations within 31 months, according to a reasonable written plan.

Q. You said land does not have to be improved, only the building. What does that mean for a vacant lot in an urban setting?

A. Building a new structure on a vacant lot would meet the "substantial investment" test.

Q. What deal structure would you recommend to redevelop a building that is owned by a government (that has no tax liability)?

A. Each deal is different based on the community's needs, business environment, and legal context (e.g. zoning regulations). Some may lease the underlying land to maintain control and sell the building with a potential leaseback. Some may sell the property.

Municipal governments can still expect to work with investors, developers and others to assemble a full financing package. Opportunity Zone provisions are an equity complement to longstanding debt incentives, such as federal lending programs and tax-exempt capital markets.

Q. If there is an equity investment, are there any protections if the business is no longer viable? Any protections or guarantees for the investment, or are only losses on tax returns available? Does the Opportunity Zone program make a good investment better or make a questionable project possible?

A. Qualified Opportunity Zone investments are equity investments that carry an inherent component of risk. As with other equity investments, there are no guarantees. Only losses on tax returns will be available if they lose value. Participation in Opportunity Funds will not substitute for due diligence and good judgment in selecting assets and businesses that will provide appropriate returns on investment in equity.

Q. Do investors need to be accredited?

A. There is no stipulation that investors be accredited. However, as a practical matter, we believe that Opportunity Funds will be oriented toward accredited and institutional investors, as those groups stand to benefit most from the favorable tax treatment.

Q. Can there be multiple funds per Opportunity Zone? Can Opportunity Funds invest anywhere in the 8,700 Opportunity Zones?

A. Yes. No limit exists to the number of Opportunity Funds that can invest in a single Opportunity Zone, nor does any geographical limit exist for investment in Opportunity Zones.

Q. Can Opportunity Fund holdings be used as collateral for debt?

A. Yes, this is actually specifically contemplated by the recent Treasury guidance.

Q. Is the Opportunity Fund required to have control of the assets?

A. No, Opportunity Funds can invest in passive or minority stakes of Opportunity Zone businesses and assets.

Q. How do you see debt being used to complement Opportunity Zone investments?

A. While Opportunity Zone businesses and assets offer equity investors favorable tax treatment, debt will continue to constitute an essential portion of the capital structure for many such investments. Investors, developers and others seeking to assemble a full financing package should look on the Opportunity Zone provisions as an equity complement to longstanding debt incentives, such as federal lending programs and tax-exempt capital markets.

Q. What kinds of equity are eligible? For instance, convertible or mezzanine securities?

A. The recent Treasury guidance specifies that equity investments, including preferred equity or partnership interest with special allocations, are eligible Opportunity Zone investments. Conversely, it specifically excludes debt as defined under the Internal Revenue Code.

Q. What if the project starts outside the Opportunity Zone but goes into an Opportunity Zone (for example, connecting a pipeline)?

A. Here, the most salient provision of the recent Treasury guidance is that "substantially all" (i.e. at least 70%) the tangible assets of qualified Opportunity Zone businesses must reside within Opportunity Zones. The most direct reading of the guidance as it relates to an individual pipeline operation would be that at least 70% of its tangible assets (lines, pumping stations, &c) must lie therein.

Q. I read that Opportunity Funds can invest in property, business or business assets in Opportunity Zones. What is an example of a "business asset" aside from a building or land? Equipment?

A. Tangible assets such as business equipment (e.g. forklifts, walk-in freezers), whether leased or purchased, and inventory also constitute qualified opportunity zone business property under the new Treasury guidance.

Q. Our Opportunity Zone is 90% residential. What's the possible investment in such a case?

A. Obvious candidates for a heavily residential Opportunity Zone include housing and commercial assets to support neighborhood amenities, such as retailers and retail-oriented commercial real estate. Such businesses are generally permissible Opportunity Zone investments.

Q. What types of infrastructure projects are eligible? Can an Opportunity Fund invest in P3 projects? How would investors make a profit on investing in an infrastructure project?

A. The definition of "infrastructure" can be very extensive, covering everything from schools and hospitals to highways and electrical grids. Such projects are eligible for Opportunity Zone treatment, subject to the "substantially all" provisions. Normal economics for infrastructure projects are likely to apply; within those contexts, the Opportunity Zone provisions offer a relative advantage for infrastructure investments therein, effectively making equity return "hurdles" easier to meet. Private investment in infrastructure earns revenue based on either a lease payment from a governmental entity or a fee based structure (like a toll road).

Q. Are hotels with bar/entertainment facilities precluded under the "sin" provisions of the legislation?

A. The "sin" provisions apply to package stores (e.g. retailers selling alcoholic beverages for consumption off-premises). Generally, hotels and restaurants are included among eligible Opportunity Zone businesses. However, golf courses are specifically identified as sin businesses and are not eligible.

Q. Can an investor that already owns the property invest in the opportunity zone by building on it and enjoy the tax benefits on the land purchase and/or construction of the building?

A. Land no, construction yes. The recent Treasury guidance specifically addresses this point. Property investments must be allocated between the land and the building. Investors are eligible for Opportunity Zone treatment, however, on "substantial improvements" made within the required 31-month window and exceeding the cost basis allocable to the building itself. The prohibition on self-dealing applies in all cases.

Q. Can an Opportunity Fund invest in workforce housing located in an Opportunity Zone?

A. Yes.

Q. Can an Opportunity Fund invest in a site and another Opportunity Fund invest in a building on the same site?

A. Yes. In fact, two different Opportunity Funds could each make independent equity investments in the same building.

Q. Can you provide an example of how this might support affordable housing development?

A. The Opportunity Zone tax benefits for equity investors supplement existing incentives on the debt side, such as federal lending programs and access to municipal capital markets. As a result, according to indicative analyses performed by Tim's firm Signet Partners, investors in affordable housing developments located in Opportunity Zones can boost their internal rate of return for equity investments by five or more percentage points compared to similar projects outside Opportunity Zones, potentially making possible new housing investments specifically targeted toward these areas.

Q. Are multi-family the only projects that qualify?

A. While multi-family projects are probably the most straightforward housing-related case for Opportunity Zone investments, no prohibition exists on single-family development or rental businesses. Such efforts, however, would need to remain mindful of the need to comply with the 70% "substantially all" provision in the new guidance.

Q. Can an Opportunity Fund invest in startups?

A. Yes.

Q. Will these funds be used for small projects? Do you anticipate a minimum size?

A. Opportunity Funds may invest in small projects, including small businesses and individual buildings. At this point, we see no reason to believe that Opportunity Fund investments will be limited to larger businesses or projects.

Q. Do you foresee greater clarity coming from future rounds of guidance on how equity investments can be made in early-stage startups that don't have high valuations or tangible property?

A. We encourage stakeholders that wish to support investment in early-stage startups to submit comments to Treasury at CC.ITA.Section.1400@irscounsel.treas.gov or the Web form at https://www.regulations.gov/comment?D=IRS-2018-0029-0001 suggesting or soliciting guidance on this topic. The Comment period on the current proposed regulations is open until noon on December 28.

Q. I note that certain addresses are incorrectly characterized as within Opportunity Zones on the mapping application. Please provide the link for the map again.

A. The Treasury Department-provided map is provided at https://www.cims.cdfifund.gov/preparation/?config=config_nmtc.xml. Several NGOs, including Local Initiatives Support Corporation and Enterprise Community Partners, also publish Opportunity Zone maps. A number of state governments offer additional mapping resources. If you know of incorrectly mapped places, we encourage you to note them in comments to the Treasury Department at CC.ITA.Section.1400@irscounsel.treas.gov or https://www.regulations.gov/comment?D=IRS-2018-0029-0001.

Q. What is the best method to identify Opportunity Funds on a national level? Will there be a directory of Opportunity Funds, possibly for developers to identify potential investors? How can I identify any local Opportunity Zone funds already in existence prior to starting one? How can I verify that a fund is in fact registered?

A. Neither the law nor the regulations require a national directory of funds. There is a continuing discussion both in the community development world and on Capitol Hill about transparency and reporting.

Right now Novogradac has published a list of funds and the National Council of State Housing Agencies published a list of funds seeking to invest in housing. Each list is based on fund managers reaching out to be listed.

Q. Is there a provision to extend the Opportunity Zones after the initial 10 year period?

A. Currently, no. But there will be many stakeholders keeping an eye on the real-world impact of Opportunity Zones. Successful implementation is likely to inspire continuation of the program.

Q. The industry would benefit from standard guidance forms for municipalities, economic development organizations, and private investors.

A. Both Treasury and the Congressional sponsors indicate preference for "light touch" regulation. At the same time, advocates and some on Capitol Hill are interested in transparency and reporting. We encourage you to provide comments to the Treasury Department on this issue at CC.ITA.Section.1400@irscounsel.treas.gov or https://www.regulations.gov/comment?D=IRS-2018-0029-0001.

The Rockefeller and Kresge Foundations are taking a lead in convening philanthropic interest in meaningful Opportunity Zone investments. Part of that effort is looking at the potential to provide some templates for creation of Opportunity Funds and impact reporting.

Other stakeholder groups may take a constructive leadership role in driving consensus on the question. Tim notes that, in the financial services space, standardized documentation for derivatives contracts emerged through an industry-driven effort.

We appreciate your interest in Opportunity Zones. This document is intended to provide general guidance to a wide range of interested parties on a new policy initiative that continues to evolve. As such, it does not constitute legal, accounting or investment advice to any individual readers. Consult your own advisors for specific guidance regarding your own individual or organizational situations.

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DRAFT TECHNOLOGY ZONE POLICY FOR DISCUSSION

Background

Creating a Technology Zone is a way to provide competitive incentives to high-tech commercial businesses making a significant capital investment in the County. Previously, local Enterprise Zone incentives were offered to companies making a minimum capital investment of $500,000 in James City County (JCC). Since the expiration of the state Enterprise Zone designation, the County has continued the local Enterprise Zone incentive program. The Office of Economic Development (OED) has evaluated options for a revised incentive program to better meet the needs of the County in designated growth areas and recommends the County establish a Technology Zone to replace the local Enterprise Zone. This supports goals 2, 3, and 4 of the Strategic Plan, which was adopted by the Board of Supervisors (BOS) on Nov. 22, 2016 and ED1.1, ED1.3.1, ED1.4, ED2.2, ED2.6, ED3.4, and ED 5.3 of the 2035 Comprehensive Plan, which was adopted by the BOS on June 23, 2015.

What is a Technology Zone?

- The creation of a Technology Zone is outlined in § 58.1-3850 of the Code of Virginia.
- Under the Code, any city, county or town may establish, by ordinance, one or more Technology Zone.
- Each locality may grant tax incentives and provide certain regulatory flexibility in a Technology Zone.
- The tax incentives may be provided for up to ten years and may include, but not be limited to: (i) reduction of permit fees; (ii) reduction of user fees; and (iii) reduction of any type of gross receipts tax.
- The extent and duration of such incentive proposals shall conform to the requirements of the Constitutions of Virginia and of the United States.
- The locality may also provide for regulatory flexibility in the zone, which may include, but not be limited to: (i) special zoning for the district; (ii) permit process reform; (iii) exemption from ordinances; and (iv) any other incentive adopted by ordinance, which shall be binding upon the locality for a period of up to ten years.
- The Code of Virginia does not define what a "Zone" is, allowing each locality to design and administer its own program.
- As of 2018, 40 localities in Virginia have adopted Technology Zone incentives.

Staff presents for discussion the following information with regard to boundaries, qualifying businesses, and incentives.

The boundaries for the Technology Zone could follow the boundaries of the Primary Service Area. Any business, commercial or industrial development inside the PSA could qualify for incentives if other requirements are met.

Technology Zone business be defined as a business that encompasses at least one of the following categories within its operations:

- **Advanced Manufacturing**
    - Advanced integrated manufacturing technology
    - Advanced materials and components

- **Professional Services**
    - Computer aided drafting & design, engineering services
    - Transportation and defense logistics
- **Science**
    - Research and design related to chemistry, physics, and the life sciences
    - Sustainable energy, water and green technologies, environmental consulting
    - Medical devices, medical diagnostics and pharmaceutical development
- **Technology**
    - Advanced mechatronics and electronics technology
    - Artificial intelligence, modeling & simulation, robotics, hardware and software development
    - Cybersecurity
    - Information technology, coding, computer system design and development, web and application development
    - Nanotechnology
    - Scientific instruments and technologies
    - Unmanned systems, aeronautics and aerospace development
    - Other scientific/technology consulting services

Companies making a significant investment into equipment related to one of the aforementioned categories could qualify for the portion of the improvement and/or equipment related to that investment.

The following Technology Zone incentives could be administered annually through the JCC Economic Development Authority (EDA) similarly to how the previous Enterprise Zone incentives have been administered:

- **BUSINESS REAL ESTATE IMPROVEMENT GRANT -** Capital investments resulting in a minimum of $500,000 net new real property assessment would be eligible for the Business Real Estate Improvement Grant. The incentive would be based upon the difference between real property assessments on the subject property pre- and post-investment. The incentive amount would be granted to the property owner in the form of a cash incentive for the first three years following the completion of the investment (and reassessment). Grant payments will be made each January following the first payment made at the new assessment level. Please see Table 1, Estimated Tax Calculator, which uses past Enterprise Zone projects (labeled Actual), prospective deals (labeled Proposal) and hypothetical projects in $1M and $10M amounts to estimate annual taxes and various incentive scenarios.
- **BUSINESS EQUIPMENT GRANT -** Capital investments in tangible property resulting in a minimum of $250,000 total original cost of net new assessable assets would be eligible for the Business Equipment Grant. The incentive would be based upon the

difference between assessments pre- and post-investment and would be administered consistently with the Real Estate Improvement Grant.

The Business Real Estate Improvement Grant and Business Equipment Grant are very similar to the previous JCC Enterprise Zone incentives. In order to be competitive staff recommends reducing the timeframe from five years to three years, and having the same payment each year for the three years, rather than the declining scale used in the current Enterprise Zone. To simplify administration, the same incentive rate could be used for both Real Estate Improvement and Business Equipment Grants. Business Equipment Grants could apply to equipment assessed either as Machinery & Tools or Business Personal Property. Table 1 uses Real Estate Improvements for illustration.

Staff believes replacing the Enterprise Zone with a Technology Zone will increase the County's ability to compete with other localities for "Advanced Materials and Components" companies along with other highly sought-after technology sector jobs. Both of these sectors were identified as important target sectors in the Greater Williamsburg Target Sector Analysis. These incentives would be funded from the General Fund, with net new tax revenue that results directly from the associated investments.

Additional incentives outlined below could be considered as part of this program:

- **JOB CREATION GRANT -** In order to qualify for job creation incentives, a company must create 10 or more permanent full-time positions. The median wage of all new jobs must be equal or greater to 2.5 times the federal minimum wage. A cash incentive of $1000 per job would be awarded for only those jobs above the threshold; the highest two positions would not be considered in the median wage or be eligible for the incentive.

A Job Creation Grant would require a funding source, and staff would recommend a maximum grant amount be established if this incentive is included in the program.

- **PERMIT FEE WAIVERS -** The existing local Enterprise Zone grant allows for permit fee waivers for qualifying businesses within the Zone. Because we are looking to expand the zone to the PSA, it would not be prudent to waive all fees for all qualifying businesses, therefore the OED and JCC EDA will evaluate a separate criteria for waiving fees in certain instances.

Permit Fee Waivers would not require a direct funding source. Currently, Enterprise Zone projects are eligible for permit fee waivers; this incentive results in unrealized revenue to the County.

Staff values and appreciates any feedback offered by the EDA with regard to boundaries, qualifying businesses, and incentives.

Table 1. Estimated Tax Calculations

Case Study	Actual 1	Actual 2	Actual 3	Proposal 1	Actual 4	Actual 5	Actual 6	Million	Proposal 2	10Mil	Actual 7
Net new assessment after investment	*$384,400*	*$403,200*	*$416,600*	*$425,000*	*$696,200*	*$755,300*	*$767,800*	*$1,000,000*	*$9,000,000*	*$10,000,000*	*$32,203,000*
Annual net new RE tax @ .84	$ 3,228.96	$ 3,386.88	$ 3,499.44	$ 3,570.00	$ 5,848.08	$ 6,344.52	$ 6,449.52	$ 8,400.00	$ 75,600.00	$ 84,000.00	$ 270,505.20
EZ Year 1 (.0045)	1,729.80	1,814.40	1,874.70	1,912.50	3,132.90	3,398.85	3,455.10	4,500.00	40,500.00	45,000.00	144,913.50
EZ Year 2 (.0036)	1,383.84	1,451.52	1,499.76	1,530.00	2,506.32	2,719.08	2,764.08	3,600.00	32,400.00	36,000.00	115,930.80
EZ Year 3 (.0027)	1,037.88	1,088.64	1,124.82	1,147.50	1,879.74	2,039.31	2,073.06	2,700.00	24,300.00	27,000.00	86,948.10
EZ Year 4 (.0018)	691.92	725.76	749.88	765.00	1,253.16	1,359.54	1,382.04	1,800.00	16,200.00	18,000.00	57,965.40
EZ Year 5 (.0009)	345.96	362.88	374.94	382.50	626.58	679.77	691.02	900.00	8,100.00	9,000.00	28,982.70
[1]Total EZ 5 years	**5,189.40**	**5,443.20**	**5,624.10**	**5,737.50**	**9,398.70**	**10,196.55**	**10,365.30**	**13,500.00**	**121,500.00**	**135,000.00**	**434,740.50**
0.0042	1,614.48	1,693.44	1,749.72	1,785.00	2,924.04	3,172.26	3,224.76	4,200.00	37,800.00	42,000.00	135,252.60
[2]Total 3 years @.0042	**4,843.44**	**5,080.32**	**5,249.16**	**5,355.00**	**8,772.12**	**9,516.78**	**9,674.28**	**12,600.00**	**113,400.00**	**126,000.00**	**405,757.80**
0.0045	1,729.80	1,814.40	1,874.70	1,912.50	3,132.90	3,398.85	3,455.10	4,500.00	40,500.00	45,000.00	144,913.50
[3]Total 3 years @.0045	**5,189.40**	**5,443.20**	**5,624.10**	**5,737.50**	**9,398.70**	**10,196.55**	**10,365.30**	**13,500.00**	**121,500.00**	**135,000.00**	**434,740.50**
0.0050	1,922.00	2,016.00	2,083.00	2,125.00	3,481.00	3,776.50	3,839.00	5,000.00	45,000.00	50,000.00	161,015.00
Total 3 years @.0050	**5,766.00**	**6,048.00**	**6,249.00**	**6,375.00**	**10,443.00**	**11,329.50**	**11,517.00**	**15,000.00**	**135,000.00**	**150,000.00**	**483,045.00**
0.0055	2,114.20	2,217.60	2,291.30	2,337.50	3,829.10	4,154.15	4,222.90	5,500.00	49,500.00	55,000.00	177,116.50
Total 3 years @.0055	**6,342.60**	**6,652.80**	**6,873.90**	**7,012.50**	**11,487.30**	**12,462.45**	**12,668.70**	**16,500.00**	**148,500.00**	**165,000.00**	**531,349.50**
0.0060	2,306.40	2,419.20	2,499.60	2,550.00	4,177.20	4,531.80	4,606.80	6,000.00	54,000.00	60,000.00	193,218.00
Total 3 years @.0060	**6,919.20**	**7,257.60**	**7,498.80**	**7,650.00**	**12,531.60**	**13,595.40**	**13,820.40**	**18,000.00**	**162,000.00**	**180,000.00**	**579,654.00**
0.0065	2,498.60	2,620.80	2,707.90	2,762.50	4,525.30	4,909.45	4,990.70	6,500.00	58,500.00	65,000.00	209,319.50
Total 3 years @.0065	**7,495.80**	**7,862.40**	**8,123.70**	**8,287.50**	**13,575.90**	**14,728.35**	**14,972.10**	**19,500.00**	**175,500.00**	**195,000.00**	**627,958.50**
0.0070	2,690.80	2,822.40	2,916.20	2,975.00	4,873.40	5,287.10	5,374.60	7,000.00	63,000.00	70,000.00	225,421.00
Total 3 years @.0070	**8,072.40**	**8,467.20**	**8,748.60**	**8,925.00**	**14,620.20**	**15,861.30**	**16,123.80**	**21,000.00**	**189,000.00**	**210,000.00**	**676,263.00**
0.0075	2,883.00	3,024.00	3,124.50	3,187.50	5,221.50	5,664.75	5,758.50	7,500.00	67,500.00	75,000.00	241,522.50
Total 3 years @.0075	**8,649.00**	**9,072.00**	**9,373.50**	**9,562.50**	**15,664.50**	**16,994.25**	**17,275.50**	**22,500.00**	**202,500.00**	**225,000.00**	**724,567.50**
0.008	3,075.20	3,225.60	3,332.80	3,400.00	5,569.60	6,042.40	6,142.40	8,000.00	72,000.00	80,000.00	257,624.00
Total 3 years @.0080	**9,225.60**	**9,676.80**	**9,998.40**	**10,200.00**	**16,708.80**	**18,127.20**	**18,427.20**	**24,000.00**	**216,000.00**	**240,000.00**	**772,872.00**
0.0084	3,228.96	3,386.88	3,499.44	3,570.00	5,848.08	6,344.52	6,449.52	8,400.00	75,600.00	84,000.00	270,505.20
[4]Total 3 years @.0084	**9,686.88**	**10,160.64**	**10,498.32**	**10,710.00**	**17,544.24**	**19,033.56**	**19,348.56**	**25,200.00**	**226,800.00**	**252,000.00**	**811,515.60**

The Enterprise Zone was adopted locally in 1996. At that time, the tax rate was .0077.

[1]Total Enterprize Zone (EZ) incentive over the five-year EZ period. Incentive is paid following the investment, related assessment and first year Real Estate tax paid at the post-investment amount.

[2]This represents 50% of the 84-cent tax rate, or an incentive of $.42 out of every $.84 paid in tax.

[3]Offering an incentive over a three-year period vs. five-year period, this represents the same total incentive as the EZ.

[4]An incentive at this level would result in the County not realizing net new tax revenue until Year 4 after the investment was complete. This is not being proposed at this time, and is included for illustration purposes only.

DRAFT STRATEGIC INVESTMENT AREAS POLICY

At last year's retreat, the EDA discussed several opportunities and goals that could support our efforts to grow our target market sectors. One recommendation that rose to the top of priorities was to "create areas for strategic investment and develop a long term vision" for these identified areas. Staff has developed information to outline what this would look like and how such a policy could be implemented.

Strategic Investment Areas (SIAs) will define boundaries for strategic investment so that James City County (JCC) can better leverage limited resources and, as needed, concentrate the pockets of growth through redevelopment and infill development within the SIA boundaries with a clearly defined plan. Ultimately, the goal of the SIAs would be to preserve the rural character of the County outside of the Primary Service Area (PSA) and in lower density areas, while creating and encouraging opportunities for economic investment within the SIAs.

The Code of Virginia §15.2-2223.1 allows for optional "Urban Development Areas" (UDAs) to foster strategic growth through greater density development and a variety of land uses that incorporates elements of traditional neighborhood design such as walkability, diversity of land uses and access to a variety of recreation and transportation options (bike, walking, bus, auto, etc.). In 2009, the Board of Supervisors (BOS) recognized 11 such areas in the County which including a portion of Green Mount Industrial Park in the Grove area. Expanding upon the work done through the Comprehensive Plan in 2009, SIAs can be defined using the same principles set forth in the Code supporting UDAs.

During the community workshops for the 2035 Strategic Plan, participants preferred finding ways to "identify and promote specific areas for redevelopment and create shovel-ready sites." (p.43) This principle is further supported by the following goals:

- ED5.3 "Encourage new development and redevelopment of non-residential uses to occur mainly in areas where public utilities are either available or accessible with the PSA and infrastructure is supportive."
- ED5.4 "Facilitate the development of sub-area master plans for strategic areas…"
- ED5-6 "Develop strategies to encourage the redevelopment of commercial areas throughout the County"

Defining the SIAs would allow for additional grant money for planning and design along with public infrastructure. For example, the Virginia Office of Intermodal Planning and Investment provides professional planning consultant assistance grants to local governments and regional entities interested in designating such areas.

SIAs would allow for targeted implementation tools such as special incentives, design guidelines specific to the district, development of business improvement districts within commercial areas and greater leverage of resources for key infrastructure projects. However, to be successful, it is highly recommended each SIA include, at minimum, economic impact and market absorption studies, followed by a master planning process that can then serve as an addendum to the County's Comprehensive Plan.

Small area master plans done as a part of SIAs help preserve and enhance the character of each defined area through the transformation of under-utilized property by identifying strategic development opportunities and targeted investment in public infrastructure.
The SIA master plans will also:

- Strategically utilize limited resources to get the best return on investment
- Develop a phasing strategy for implementation
- Define the unique character of each area and develop strategies to retain and enhance it
- Identify compatible infill development and redevelopment opportunities.
- Avoid a segmented approach to development
- Allow the County to be proactive to development proposals by clearly defining the desired land uses, infrastructure and densities, therefore streamlining the development process for projects done in conformance with master plan.
- Give definition and depth to the Comprehensive Plan in the areas that have the greatest economic impact
- Guide financial decisions related to public and private use of land and public facilities, which promotes good stewardship of resources
- Create opportunities for public-private partnerships
- Encourage opportunities for greater collaboration of County staff across multiple departments for successful implementation

For County staff, along with elected and appointed officials, the master plan will provide:

- A consistent and better defined point of reference against which to make more informed decisions
- More predictability regarding budgeting and planning
- A method to preserve the community character
- The potential to produce positive economic development through targeted development projects supported by the County's endorsed plan
- A means to identify capital improvement project (CIP) priorities and better facilitate attaining outside funding from state and federal agencies.

Without identifying SIAs and creating master plans for SIAs, over time:

- Growth will continue to be scattered and will lack a cohesive objective. JCC must identify its development and conservation goals.
- The County could face limited revenue and diminished opportunities with under-utilized land or land that is landlocked or too small for significant development
- It may be more difficult to map out a redevelopment strategy to purchase and consolidate under-utilized land.
- Important land use, infrastructure, and fiscal decisions would be more fragmented.
- The County could fail to learn from the mistakes of other localities that lacked a cohesive development strategy

Most Hampton Roads cities and some counties have adopted one or more master plans. Within the last 10 years, Virginia Beach has adopted at least nine master planned areas, known as Strategic Growth Areas. Some local examples of successful Master Planning include:

- **Downtown Norfolk** – City's tax revenue has increased by nearly $2 billion in the master plan area since its first master plan in 1989.
- **Coliseum Central** – over $1.5 billion in public and private investment since the 2004 Master Plan's adoption
- **Virginia Beach Ocean Front District** – several new mixed-use development blocks since the 2012 adoption transforming the oceanfront into a vibrant location for tourists, groups and locals.
- **Charlottesville** – In 2017, the City adopted an SIA master plan that encumbered 330 acres south and east of downtown. Although in its early stages of implementation, the plan won the Congress for New Urbanism's 2018 Strategic Charter Award.

The Process for developing the SIAs includes:

1. Define the boundaries of the designated areas.
2. Inventory and analyze existing conditions (begin SWOT).
3. Identify and complete necessary economic market analyses to examine both economic impact and market absorption. These market studies are typically consultant based studies overseen by County economic development staff.
4. Open process with public participation and identified stakeholders to guide priorities and maintain a sense of community and historical context. With community and stakeholder input, the plan is more easily embraced as there is a greater sense of ownership from the community.
5. Develop the master plan.
6. Develop the implementation tools recommended in the master plan.

Staff recommends that the initial areas explored include the Grove area and the Jamestown Destination Area. The Jamestown Destination area includes various historic sites alongside the Virginia Capital Trail and several County-owned assets to include the JCC Marina, Jamestown Beach, Jamestown Beach Event Park and the Amblers House. The Jamestown area is the second most visited tourism area in the County following Busch Gardens Williamsburg. Although the Jamestown Destination area has been a large part of the tourism industry for the Greater Williamsburg area, this area is referenced as a spoke rather than a hub for tourism and economic activity. A County staff team is currently working on revisions to the Shaping Our Shores Master Plan adopted in 2008, so this revision would be taken into consideration as part of this effort.

The Grove area has been recognized a distressed community and was the area of JCC designated as an Enterprise Zone in 1996. However, this area is remains a great opportunity as it was designated as an Opportunity Zone in May 2018. The Grove area includes several sites in James River Commerce Center owned by the Economic Development Authority and there is additional property available in the Green Mount Industrial Park and the former BASF site. It is important to recognize the need for balance between the residential areas of this area along with the potential for economic growth and expansion in County's industries.

Due to the assets and opportunities in both of these areas, staff recommends exploration of these areas as potential SIAs.

James City County EDA
Economic Development Initiatives – 2017

Adopted March 9, 2017

Regulatory Framework

1. Continue to work with planning staff, economic development staff and administration, to streamline and simplify the development review process (both administrative and legislative).
2. Drive the updating of the Business Climate Taskforce Report and Recommendations.

Site & Building Development

1. Identify and pursue parcels of industrial land that JCC can improve through public investment or Public-Private-Partnership, to provide more inventory of sites ready for target industries identified by the GWP's Target Sector Analysis including: (1) Advanced Materials and Components, (2) Food and Beverage, (3) Professional and Technical Services, (4) Defense, and (5) Tourism.
2. Identify and pursue potential development of Class A or B office space or flex space to accommodate Professional and Technical Services, through public investment, private investment and/or PPP opportunities.
3. Along with County Administration and Parks & Recreation, develop a long-range vision and plan for the Jamestown Marina and Jamestown Beach sites.

Regional Initiatives

1. Advance the development of the Greater Williamsburg Partnership and the Launchpad so that they become valuable contributors and successful joint ventures with our partner localities.
2. Identify and prioritize regional opportunities that advance economic development efforts.

James City County
Retail over 175,000 Sq Ft
Industrial Park
Office Park
Industrial
Planned Unit Development - Commercial
Military Installation
Primary Service Area
To Richmond Approx. 35 Mi
New Kent County
King and Queen County
York River
Stonehouse Commerce Center
Stonehouse South
Hankins Industrial Park
Jacobs Industrial Park
York River State Park
Gloucester County
York County
Williamsburg Pottery
Lightfoot Marketplace
Camp Peary
Charles City County
Williamsburg Premium Outlets
Cheatham Annex
Discovery Business Park
New Town
Settlers Market
Monticello Marketplace
College of William & Mary
Colonial Williamsburg
City of Williamsburg
Williamsburg Crossing
Green Springs Office Park
Williamsburg Office Park
Yorktown Naval Weapon Station
Busch Corporate Center
Jamestown Beach Event Park
Busch Gardens
National Colonial Parkway
James River
Jamestown Settlement
JCC Marina
Historic Jamestowne
Jamestown Island
James River Commerce Center
Greenmount Industrial Park
BASF
Branscome
Newport News
Surry County
Fort Eustis
To Norfolk Approx. 30 Mi
James City County VIRGINIA Jamestown 1607
office of ECONOMIC DEVELOPMENT
1 inch = 3,333 feet
0 1 2 3 Miles
Copyright James City County, Sept 2017
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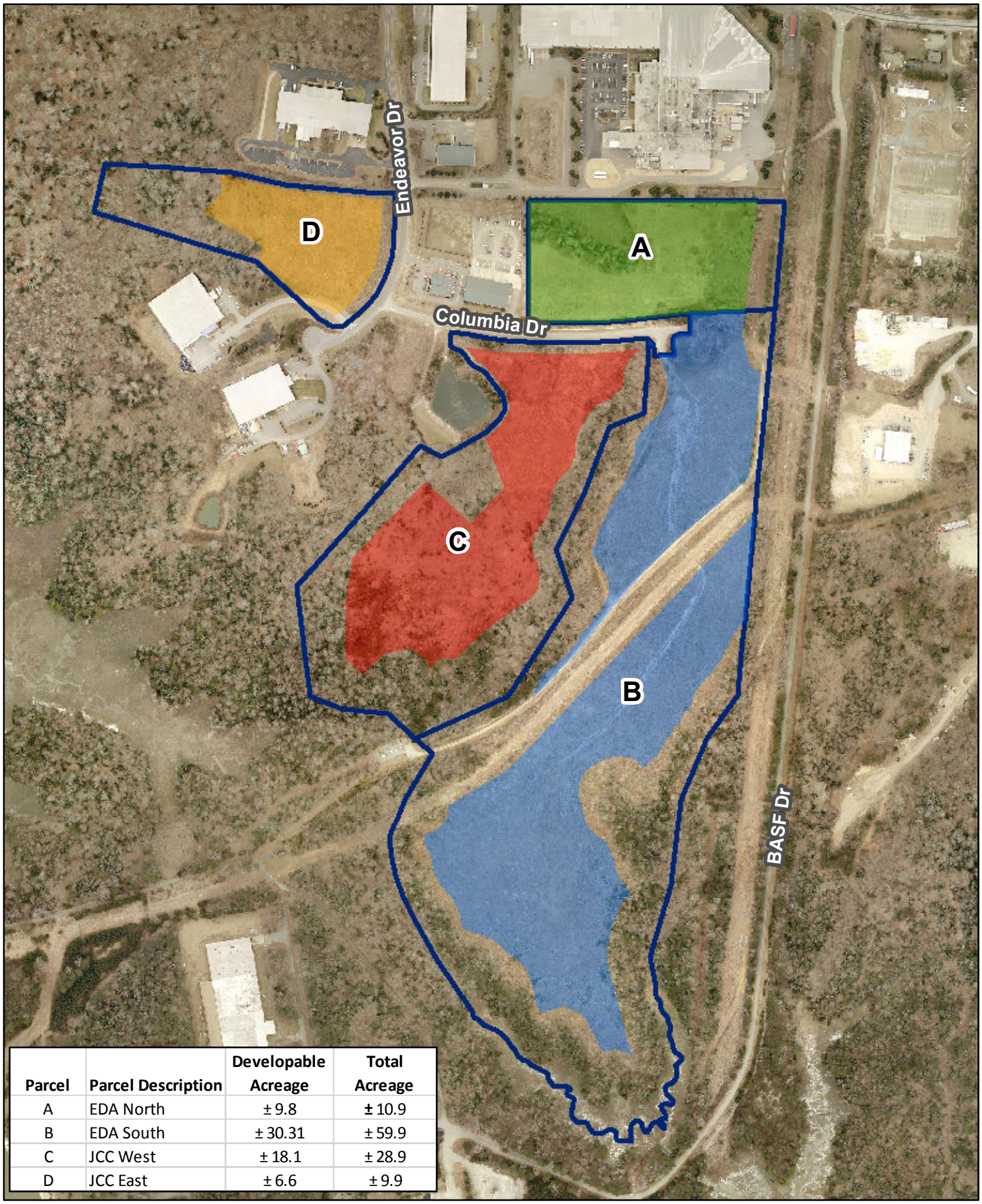
PRIORITY	PARCEL	TASK	STATUS UPDATE	START DATE	END DATE	Est. Cost	NARRATIVE
1	B, C, D	Drainage Improvements plan	Preliminary Plan completed	1-Jun-18	26-Oct-18	$7,500	In a recent meeting with site consultants, it was determined there are drainage issues on Parcels B, C, and D from prior development in the area.
2	A	Development Concepts	completed	13-Aug-18	9-Nov-18	$2,400	Upon the recommendation of the real estate committee and approval of the EDA, VHB developed various development concepts for Parcel A to use for marketing the site.
3	B, C, D	Drainage Improvement Permitting & Construction	Under Review	26-Oct-18	30-Jul-19	$150,000	The E&S plan was submitted for preliminary review and concept approval was received on November 13. The formal site plan will need to be submitted and include additional calculations. This includes the site plan review, ROW permitting and estimated construction cost for improvements.
4	A	Purchase Wetland Bank Credit		3-Jan-18	TBD	$6,000	This is a critical and necessary step to mitigate the impacts of the construction of a proposed shell building. The ability to purchase will depend on the viability of credits in the mitigation banks.
5	A	Topo Survey		TBD	TBD	$22,000	Needed to prepare new and updated site plan.
6	A	Geotechnical Study		10-Jan-18	TBD	$3,500	Involves a detailed investigation of the soil. This is a critical step prior to any form of construction.

7	**A**	Final Site Plan Amendment	Work with Planning to "Fast Track"	1-Feb-19	TBD	$28,000	Presents final vision of what the future building could look like.
8	**A**	Amend Architectural Plans	Will coordinate in conjunction with site plan	TBD	TBD	$150,000	This will account for additional ceiling height, dock doors, etc. reflecting current market demands and will show up to 150,000 square feet.
9	**A**	LDP, RFP for Public/Private Partnership		TBD	TBD	$0	Public/Private partnerships are always preferable. This process helps gauge interest in a proposed shell building. All of the above items must be performed prior to the RFP.
10	**A**	Preliminary Site Work and Grading		TBD	TBD	$135,000	This is to prepare for vertical construction and makes the site its most marketable to a prospective developer, with or without a building.
11	**A,B, C, D**	Sanitary Sewer Capacity Study	Applies to all 4 parcels	TBD	TBD	$10,000	This study is critical for prospective development in understanding the cost of each parcel's infrastructure needs. This study will look at all four parcels A, B, C & D. The Real Estate Committee has decided to table this until there is better handle on total developable area and/or and end user for the site.
12	**B, C, D**	Environmental Phase I & II, Cultural Resource Study	Dependent on the completion of drainage improvements	TBD	TBD	$0	This study is necessary to determine developable areas and to identify unknown development challenges.
13	**B, C, D**	Delineate Wetlands & Pursue Amy Corp Permit	Working with Consultant	TBD	TBD	$10,000	This will be a reconfiguration of an expired delineation. This project confirms where wetlands are located on the parcel, which ultimately helps to determine the total developable area. This permit will last for five years.

Ongoing	**JRCC**	Update Covenants and restrictions		20-Nov-18	1-Jul-19	$0	With the EDA as the prominent owner of property in JRCC, staff is now reviewing the covenants and restrictions to suggest updates based on WDI no longer being a party to the commerce park.
TBD	**JRCC**	Fiber Installation		TBD	TBD	$160,000	Staff has received some initial cost estimates from Lumos for the Fiber Installation.
TBD	**JRCC**	Rt 60 Stoplight and Intersection Improvements		TBD	TBD	$250,000	Staff met with Planning to discuss proffers that require a stoplight and potential other intersection improvements on Rt 60 when certain thresholds were met. It was determined that the thresholds have not been met for further evaluation which includes 750,000 SF of built space.

A	Parcel A Estimated Cost	$356,900	
B	Parcel B Estimated Cost	$167,500	
C	Parcel C Estimated Cost	$15,000	
D	Parcel D Estimated Cost	$0	
JRCC	JRCC Park Improvements Estimated Cost	$410,000	
	PARCELS A, B, C, D TOTAL COSTS	**$949,400**	



Parcel	Parcel Description	Developable Acreage	Total Acreage
A	EDA North	± 9.8	± 10.9
B	EDA South	± 30.31	± 59.9
C	JCC West	± 18.1	± 28.9
D	JCC East	± 6.6	± 9.9

1 inch = 500 feet

0 250 500 Feet

James River Commerce Center

N

This drawing is neither a legally recorded map nor a survey and is not intended to be used as such. The information displayed is a compilation of records, information,and data obtained from various sources, and James City County is not responsible for its accuracy or how current it may be.

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