EXECUTIVE SUMMARY

Purpose of Study and Background

The City of Chesapeake Virginia engaged the services of BTG, Inc. to complete a land-use and infrastructure study for the western portion of Western Branch section of the City. The purpose of the Western Branch Land Study was to develop two land-use, infrastructure, and economic development alternatives for the western portion of the Western Branch Borough. The area comprises an approximately 6.6 square miles area, which is bounded by Pughsville Road to the north, I-664 to the east, Military Highway to the south, and the Chesapeake/Suffolk city line to the west.

Initial Citizen Input

The first step of the study was to hold a citizen input meeting. The meeting was held on March 20, 2000 with approximately 100 citizens in attendance. At the meeting, City staff and BTG led the citizens through a "SWOT" analysis, where the citizens identified what they saw as the (S)trengths, (W)eaknesses, (O)pportunities, and (T)hreats for the study area. A survey questionnaire was also distributed. The results of the meeting are included as an appendix to the report.

Steering Committee

A Steering Committee was formed to assist in the development of the study. The nine (9) member Steering Committee was comprised of citizens, business representatives, and major landowners that had a stake in the outcome of the study. Additionally, two Council Members, two Planning Commissioners and a member from the Industrial Development Authority also served as ex-officio members on the Steering Committee. A technical advisory committee, comprised of senior level professionals from various city, regional, and state agencies, assisted the Steering Committee during the study. The purpose of the Steering Committee and Technical Advisory Committee was to review and endorse the work products developed by BTG, Inc.

The Steering Committee met four times. At their first meeting, the Committee identified issues they determined to be important considerations for the study. At the second meeting, BTG, Inc. provided an overview of key findings based on their analysis of existing conditions and input received from the community. The Committee then held a brainstorming session regarding possible land use and infrastructure scenarios utilizing the information provided by the consultant and the community. The Committee then held a brainstorming session regarding possible land-use and infrastructure scenarios utilizing the information provided by the consultant and the community. At the third Steering Committee meeting, BTG, Inc. presented five (5) land use alternative scenarios to the Steering Committee for their review and comment. The various land use alternatives reflected sensitivity toward existing development patterns, environmentally sensitive areas, roadway patterns, planning and economic development objectives, socio-economic characteristics, and the vision for the study area as forwarded by the citizens from the area. The Steering Committee selected two (2) alternatives, with revisions and recommendations, for further consideration. BTG, Inc. was charged with analyzing the fiscal and economic impacts of the selected land use alternatives.

Supplementing the input received from the residents, major landowners, the Steering Committee, and City staff, BTG, Inc. based the highest and best use recommendations on numerous other considerations including:

- Regional Growth Rates and Projections
- Capture Percentage of the Chesapeake Non-Residential Projected Growth
- Growing Strength of the I-664 Corridor
- Regional Roadway Congestion and Travel Uncertainties
- Improvements and Increased Use of the Route 58/Route 460 Corridor
- Possible Extension of the Pleasant Grove Connector

The two land-use alternatives that were prepared by incorporating the Steering Committee input were designated as Alternative D and Alternative E.

A fourth Steering Committee meeting was held to present and discuss the detailed financial, fiscal impact and infrastructure costs associated with Alternative D and Alternative E.

Final Citizen Meeting

The final citizen meeting was held on September 28, 2000, and consisted of a presentation of the two selected alternatives and the details associated with each along with several renderings and sketches depicting development concepts for several of the study areas. Approximately 50 people were in attendance. Following the presentation, City staff and BTG representatives answered questions and discussed the plans in small group settings. A questionnaire was provided and completed by many of those in attendance. The completed questionnaires are included in an appendix to the report.

Alternatives Description

Illustrations of Alternatives D and E are presented below. Both of the alternatives seek to enhance and protect the existing residents and their environment, while providing ample economic development opportunities for the City. Roadway recommendations were made and visually depicted to complement the existing and proposed land uses. Both alternatives are somewhat similar in design, containing a proposed golf course, focusing major retail and office development, identifying neighborhood commercial areas, suggesting complementary vehicular traffic circulation flow, pedestrian and bike trails, open space locations, and modest residential growth opportunities. The most obvious difference between the two plans centers around the extent of the industrial land use in the northern portion of the study area. Alternative "E" presents a larger vision for the extent of industrial land near the I-664 Pughsville Interchange.

Detailed Description of Alternative D:

Land Use:

Alternative Scenario "D" provides for 110 acres of Light Industrial/Manufacturing/Warehouse area, which would accommodate 1,500,000 square feet of space in addition to what might be developed as part of the Hampton Roads Executive Airport complex. Office areas total to about 200 acres, which would accommodate 3,000,000 square feet of space; Office/Flex area is at 150 acres, allowing for 2,250,000 square feet of space; and Commercial Retail is at 170 acres allowing for 2,000,000 square feet.

A 20-year projection for the Alternative Scenario "D" includes development of 970 single family and 600 multi-family units, 2.3 million square feet of retail and hotel rooms, 2.7 million square feet of office, and 2.5 million square feet of industrial space.

Year	Residential (Units)	Multifamily (Units)	Commercial Retail (sq.ft.)	Commercial Hotel (Rooms)	Commercial Office (sq.ft.)	Manufacturing/ Warehousing (sq.ft.)	Office/ Flex (sq.ft.)
2000-2004	220	300	155,000	100	440,000	200,000	444,000
2005-2009	250	300	451,250	200	440,000	400,000	444,000
2010-2014	250	0	576,250	300	640,000	200,000	666,000
2015-2019	250	0	777,500	200	580,000	200,000	666,000
Total	970	600	1,960,000	800	2,100,000	1,000,000	2,220,000

* Note: Office/Flex Space consists of 30% Office and 70% Manufacturing/Warehouse.

Infrastructure Needs:

The infrastructure and phasing plan for Alternative D is as follows:

Year 1 to 5

- Roads (Cost - $11.1 million)

  Widen 4,000 feet of Portsmouth Boulevard to four lanes west to the Chesapeake/Suffolk City line
  Construct 3,600 feet of four-lane Road "A" west from Jolliff Road
  Construct 2,000 feet of two-lane Road "B".
  Widen 2,000 feet of Jolliff Road north of Portsmouth Boulevard to four lanes

- Water & Sewer (Cost - $1.2 million)

  Construct 2,700 feet of 12-inch water main and sewer along Portsmouth Boulevard from Jolliff Road to the future Western Parkway
  Construct 3,600 feet of 16-inch water main and sewer along Road "A" west from Jolliff Road

Year 6 to 10

- Roads (Cost - $28.2 million)

  Widen 5,300 feet of Portsmouth Boulevard from I-664 to the Chesapeake/Suffolk City line
  Widen 9,300 feet of Jolliff Road from Road "A" to Portsmouth Boulevard to four-lane divided
  Construct 4,300 feet of the new Western Parkway from Portsmouth Boulevard to Road "D" as a four-lane divided road
  Construct 900 feet of new two-lane Road "D"

- Water & Sewer

  None

Year 11 to 15

- Roads (Cost - $30.0 million)

  Construct Dock Landing Road extended west from Jolliff Road to new Western Parkway (5,000 feet) as a four-lane divided road
  Construct northern 3,300 feet of Western Parkway south from Portsmouth Boulevard to Dock Landing Road Extended as four-lane divided
  Construct 13,900 feet of two-lane circulation roads, Road C

- Water & Sewer (Cost - $4.5 million)

  Construct 3,300 feet of 16-inch water main and sewer on portion of Western Parkway from Portsmouth Boulevard to Dock Landing Road Extended
  Construct 5,000 feet of 16-inch water main and sewer on Dock Landing Road Extended from Jolliff Road to Western Parkway main
  Construct 9,600 feet of 16-inch water from Jolliff Road at Lowe's property along future Western Parkway and connecting across I-664 into the Gum Road main

Year 16 to 20

- Roads (Cost - $79.6 million)

  Construct remaining 13,300 feet of Western Parkway from Dock Landing Road Extended to Route 58 Military Highway as four-lane divided
  Construct remaining 8,800 feet of Western Parkway north of Portsmouth Boulevard to Pughsville Road as four-lane divided
  Construct Route 58 Military Highway interchange
  Construct the remaining 4,300 feet of four-lane divided Road "A" to the Western Parkway

- Water & Sewer (Cost - $4.4 million)

  Construct 7,300 feet of 16-inch water main on Western Parkway from Dock Landing Road Extended to Road "A" and the remaining 4,300 feet of 16-inch water main and sewer on new Road "A"

Other Public Needs:

Summary of Capital Costs in 2000 Dollars

Category	Cost
Roads	$70,400,000
Water	$2,800,000
Sewer	$2,800,000
School Facilities	$10,816,682
Fire Facilities	$2,572,436
Police Facilities	$921,040
Park Facilities	$2,224,800
Library Facilities	$578,448
Total	**$93,113,406**

Source: BTG, Inc. Calculations, October 2000

Infrastructure Costs

Time Period	Roadway Infrastructure	Utility Infrastructure
Year 5	$11,100,000	$1,200,000
Year 10	$28,200,000	$0
Year 15	$30,000,000	$4,500,000
Year 20	$79,600,000	$4,400,000
Total	**$148,900,000**	**$10,100,000**

Source: BTG, Inc. Calculations, October 2000

School Capital Costs

	Elementary			Middle School			High School		
Time Period	**Acreage**	**Building Sq. Ft.**	**Total**	**Acreage**	**Building Sq. Ft.**	**Total**	**Acreage**	**Building Sq. Ft.**	**Total**
Year 5	2.76	10,670	$1,328,734	1.82	7,467	$ 911,773	2.88	10,640	$1,456,431
Year 10	2.97	11,446	$1,770,633	1.97	8,122	$1,231,066	3.04	11,248	$1,912,937
Year 15	1.65	6,305	$1,273,838	1.1	4,585	$ 906,233	1.65	6,080	$1,350,893
Year 20	1.65	6,305	$1,625,776	1.1	4,585	$1,156,608	1.65	6,080	$1,724,119
Total	9.03	34,726	$5,998,981	5.99	24,759	$4,205,680	9.22	34,048	$6,444,380
Grand Total	**24.24**	**93,533**	**$16,649,040**						

Source: BTG, Inc. Calculations, October 2000

Fire Capital Costs

Time Period	Acreage	Building Sq. Ft.	Total (Includes Equipment)
Year 5	0.582	2,809	$553,342
Year 10	0.716	3,448	$679,178
Year 15	0.818	3,969	$676,989
Year 20	0.828	4,014	$662,927
Total	2.944	14,240	$2,572,436

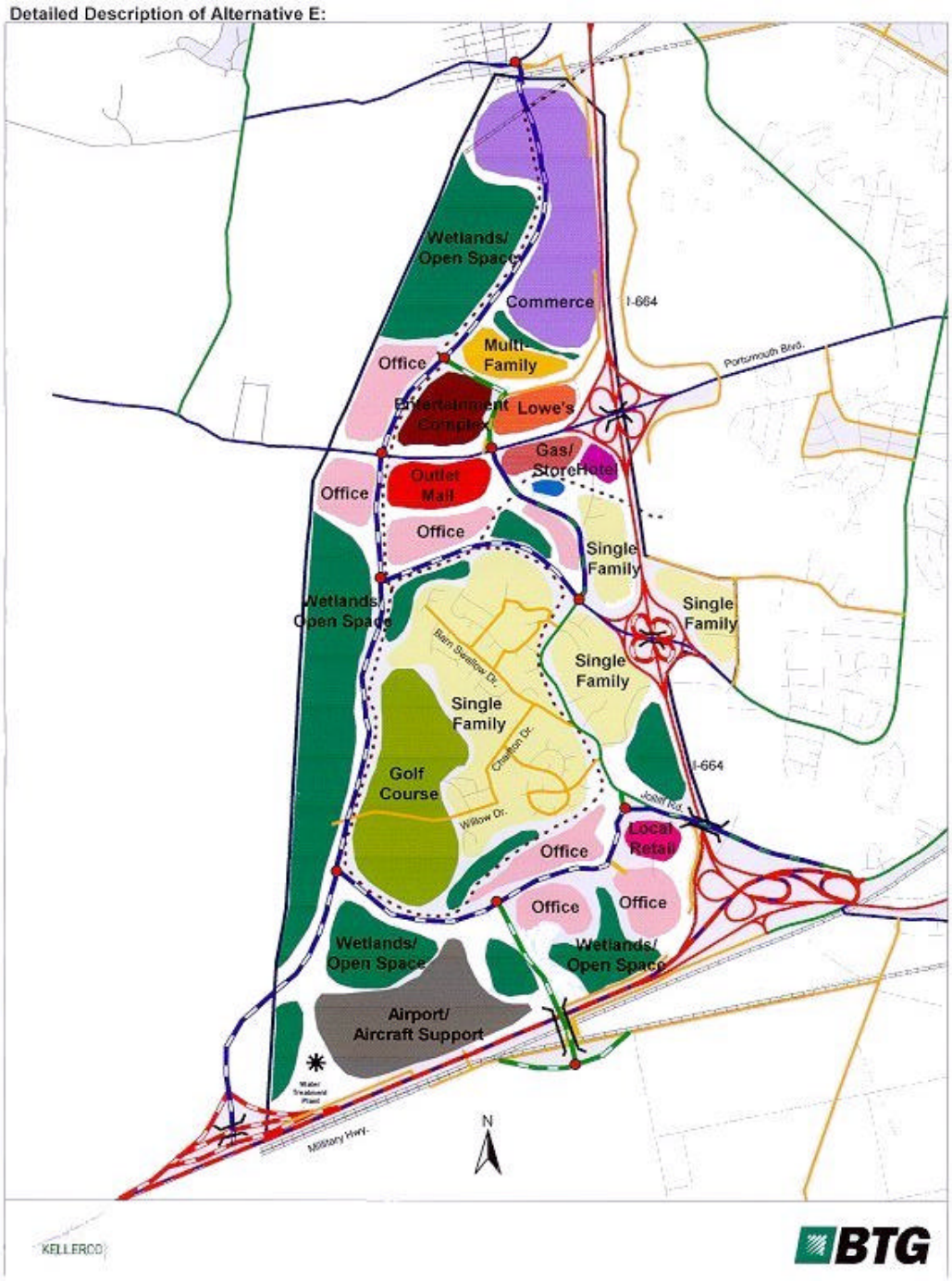
Source: BTG, Inc. Calculations, September 2000

Police Capital Costs

Time Period	Acreage	Building Sq. Ft.	Total (Includes Equipment)
Year 5	0.446	892	$178,376
Year 10	0.547	1,094	$185,928
Year 15	0.630	1,260	$251,968
Year 20	0.637	1,275	$304,768
Total	2.260	4,521	**$921,040**

Source: BTG, Inc. Calculations, September 2000

Detailed Description of Alternative E:



Land Use:

Alternative Scenario "E" provides for 280 acres of Light Industrial/Manufacturing/Warehouse area, which would accommodate 3,900,000 square feet of space in addition to what might be developed as part of the Hampton Roads Executive Airport complex. Office area totals to about 180 acres, which would accommodate 2,600,000 square feet of space; Office/Flex area is at 140 acres, allowing for 2,100,000 square feet of space; and Commercial Retail is at 220 acres allowing for 2,700,000 square feet.

A 20-year projection for the Alternative Scenario "E" includes development of 970 single family and 880 multi-family units, 2.7 million square feet of retail and hotel rooms, 3.1 million square feet of office, and 4.4 million square feet of industrial space.

Year	Residential (Units)	Multifamily (Units)	Commercial Retail (sq.ft.)	Commercial Hotel (Rooms)	Commercial Office (sq.ft.)	Manufacturing/ Warehousing (sq.ft.)	Office/ Flex (sq.ft.)
2000-2004	220	300	155,000	100	440,000	400,000	444,000
2005-2009	250	350	751,250	200	880,000	800,000	444,000
2010-2014	250	230	881,250	100	640,000	1,000,000	666,000
2015-2019	250	0	777,500	0	580,000	800,000	446,000
Total	970	880	2,565,000	400	2,540,000	3,000,000	2,000,000

* Note: Office/Flex Space consists of 30% Office and 70% Manufacturing/Warehouse.

Infrastructure Needs:

The infrastructure and phasing plan for Alternative E is as follows:

Year 1 to 5

- Roads (Cost - $13.1 million)

  Widen 4,000 feet of Portsmouth Boulevard to four lanes west to the Chesapeake/Suffolk City line
  Construct 4,600 feet of four-lane Road A west from Jolliff Road
  Construct 1,700 feet of four-lane Road B
  Widen 2,000 feet of Jolliff Road north of Portsmouth Boulevard to four lanes

- Water & Sewer (Cost – $1.2 million)

  Construct 2,70 feet of 12-inch water main and sewer along Portsmouth Boulevard from Jolliff Road west to the future Western Parkway
  Construct 4,60 feet of 12-inch water main and sewer along Road A west from Jolliff Road

Year 6 to 10

- Roads (Cost - $39.4 million)

  Widen 5,300 feet of Portsmouth Boulevard from I-664 to the Chesapeake/Suffolk City line
  Widen Jolliff Road from two-lane to three-lane between Road A and Dock Landing Road Extended (5,600 feet) and widen the remaining 4,700 feet of Jolliff Road to Portsmouth Boulevard to four-lane divided
  Construct the new Western Parkway road between Portsmouth Boulevard and Pughsville Road as a four-lane divided road (11,000 feet)

- Water & Sewer (Cost - $3.0 million)

  Construct 11,000 feet of 12-inch water main and sewer from Portsmouth Boulevard along Western Parkway and connecting across I-664 into Gum Road main
  Construct 1,700 feet of 12-inch water main and sewer Road B connecting to the Western Parkway main

Year 11 to 15

- Roads (Cost - $44.8 million)

  Construct the 16,300 feet of Western Parkway from Route 58 to Portsmouth Boulevard as six-lane divided
  Construct Route 58 interchange

- Water & Sewer (Cost - $3.0 million)

  Construct 3,100 feet of 12-inch water main and sewer on portion of Western Parkway from Portsmouth Boulevard to Dock Landing Road extended
  Construct 5,300 feet of 16-inch water main and sewer on Dock Landing Road extended from Jolliff Road to Western Parkway main

Year 16 to 20

- Roads (Cost - $54.3 million)

  Construct Dock Landing Road extended west from Jolliff Road to new Western Parkway (5,300 feet) as a four-lane divided road
  Construct the remaining 4,200 feet of Road A as four-lane divided
  Construct 3,500 feet of two-lane Road C from Road A across Route 58
  Construct two-lane bridge over Route 58

- Water & Sewer (Cost - $4.4 million)

  Construct 7,200 feet of 12-inch water main on Western Parkway from Dock Landing Road Extended to Road A and the remaining 4,200 feet of 12-inch water main and sewer along Road A

Other Public Needs:

Summary of Capital Costs in 2000 Dollars

Category	Cost
Roads	$86,500,000
Water	$3,000,000
Sewer	$3,000,000
School Facilities	$12,313,333
Fire Facilities	$3,282,114
Police Facilities	$1,395,804
Park Facilities	$2,519,400
Library Facilities	$665,044
Total	**$ 112,675,695**

Source: BTG, Inc. Calculations, October 2000

Infrastructure Costs

Time Period	Roadway Infrastructure	Utility Infrastructure
Year 5	$ 13,100,000	1,200,000
Year 10	$ 37,400,000	3,000,000
Year 15	$ 44,800,000	3,000,000
Year 20	$ 54,300,000	4,400,000
Total	**$ 149,600,000**	**$ 11,600,000**

Source: BTG, Inc. Calculations, October 2000

School Capital Costs

	Elementary			Middle School			High School		
Time Period	**Acreage**	**Building Sq. Ft.**	**Total**	**Acreage**	**Building Sq. Ft.**	**Total**	**Acreage**	**Building Sq. Ft.**	**Total**
Year 5	2.76	10,670	$1,328,734	1.82	7,467	$ 911,773	2.88	10,640	$1,456,431
Year 10	3.17	12,222	$1,887,264	2.13	8,777	$1,327,519	3.29	12,160	$2,063,853
Year 15	2.65	10,185	$1,982,668	1.78	7,336	$1,398,900	2.71	10,032	$2,145,037
Year 20	1.65	6,305	$1,625,776	1.1	4,585	$1,156,608	1.65	6,080	$1,724,119
Total	10.23	39,382	$6,824,442	6.83	28,165	$4,794,800	10.53	38,912	$7,389,441
Grand Total	**27.59**	**106,459**	**$19,008,683**						

Source: BTG, Inc. Calculations, October 2000

Fire Capital Costs

Time Period	Acreage	Building Sq. Ft.	Total (Includes Equipment)
Year 5	0.619	2,967	$584,367
Year 10	1.095	5,306	1,045,046
Year 15	1.057	5,123	847,913
Year 20	.843	4,086	804,788
Total	3.614	17,482	$3,282,114

Source: BTG, Inc. Calculations, October 2000

Police Capital Costs

Time Period	Acreage	Building Sq. Ft.	Total (Includes Equipment)
Year 5	0.505	1,427	$283,221
Year 10	0.881	2,242	445,986
Year 15	0.845	2,093	349,589
Year 20	0.669	1,592	317,008
Total	2.900	7,354	$1,395,804

Source: BTG, Inc. Calculations, October 2000

Issues And Goals Summary

The Western Branch Land Study was a process that included input from the City's citizens, business and industry representatives, municipal staff, and the consultants that culminated in an acceptable future vision

contained within two selected alternative plans for the area. In this section of the report, BTG, Inc. will summarize the issues and goals; recommend policies, techniques, and strategies; and suggest a plan of implementation.

Public input was a key element of the study from the beginning, during the development, and at the end of the planning process. A Steering Committee was formed prior to hiring BTG, Inc. to assist in the development of the study. The twenty-five member Steering Committee was comprised of citizen and business representatives that had a stake in the outcome of the study. Two council members, two planning commissioners and a member of the Industrial Development Authority also served as ex-officio members. A technical advisory committee, comprised of senior level professionals from various city, regional, and state agencies, assisted the Steering Committee during the study.

The purpose of the Steering Committee and Technical Advisory Committee was to review and endorse the work products developed by BTG, Inc. The Steering Committee met four times. At their first meeting, the Committee identified issues they determined to be important considerations for the study. At the second meeting, BTG, Inc. provided an overview of key findings based on the analysis of existing conditions and input received from the community. The Committee then held a brainstorming session regarding possible land use and infrastructure scenarios utilizing the information provided by the consultant and the community. At the third meeting, the Steering Committee selected two alternatives from the five presented, for further study. These alternatives were Alternatives "D" and "E" described earlier in this report. At their last meeting, the Steering Committee reviewed the results of the economic, fiscal, and infrastructure analysis for the two selected alternatives.

Highest And Best Use Considerations

From the input gathered from the Steering Committee, citizen input from the initial public meeting, and the stated objectives contained in the original "Request for Proposal", BTG, Inc. was guided in its analysis toward a result that would meet certain objectives. The product of the plan had to be oriented towards potential business/industry/retail uses that would maximize the tax base potential for the City of Chesapeake, while protecting existing development and incorporating the new development within the natural features of the area.

BTG, Inc. used the latest demographic/socio-economic databases and interfaced them with a Geographic Information System (GIS) to develop a location profile of the existing and projected population of the study area. Household size, age, and income were analyzed to determine the purchasing power and potential markets that would be served or attracted by the existing and future population of the study area. The latest employment projections (Year 2018) were analyzed by industry segment to determine the number of employees that would require new building space (square footage) for various non-residential uses in the City. Further, existing vacancy rates for office, retail, and industrial space were assessed, within the City and the Region, to determine current conditions of the market. From these assessments, assumptions were made regarding reasonable capture rates of these land uses for the study area. From these assumptions, BTG, Inc. developed the land use scenarios from which two, Alternative "D" and "E", were selected.

Market analyses were conducted on various desired land uses proposed by the citizens and Steering Committee. For example, several inquiries were made as to why the study area could not attract an "upscale" food market, such as a Harris Teeter or Fresh Market. BTG, Inc. conducted an analysis using its databases and the Geographic Information System (GIS) to ascertain the socio-economic and demographic characteristics in a one-half, one, three, and five-mile radius of the study area. The results of this analysis and its comparison to the profile that Fresh Market considers for entry into a market area failed to meet their minimum requirement. Within the five-mile radius of the study area, the current population is impressive at 108,000 persons, but the average household income actually declined with each increment of the analysis. Although the average household income of the study area ($58,202) was higher than the City average, it was far below the $75,000 Fresh Market minimum.

Non-Residential Uses

Further analysis on the proposed land uses was conducted using an input-output model to assess the impacts that the proposed uses would have on Chesapeake's economy. The latest economic data indicate that within the City's economy, $6 billion dollars is spent annually on goods and services. By comparison, $50 billion is spent annually within the Hampton Roads region.

In determining the manufacturing element of the proposed uses for the study area, BTG, Inc. reviewed various recent studies that highlighted which industries should be targeted for the Hampton Roads area. The primary component of these studies was the identification of industry targets that were felt to have a "better than average chance" of relocating to the Hampton Roads area. The use of targets is generally assumed to enhance the recruitment effort as opposed to pursuing an economic development program that recruits industries indiscriminately.

For the Western Branch Land Study, the following twelve (12) industry groups were selected from the top ranked targeted industries for Hampton Roads. These industries, listed by Standard Industrial Code (SIC), were 4200 - Motor Freight Transport & Warehousing, 3571 - Electronic Computers, 3542 - Machine Tools, Metal Forming Types, 3053 - Gaskets, Packing, and Sealing Devices, 3821 - Laboratory Apparatus & Furniture, 2720 – Periodicals, 3711 - Motor Vehicles, 3010 - Rubber Tires, 3561/3563 - Pumps & Compressors, 3671 - Electron Tubes, 3511 - Steam Engines & Turbines, 3549 - Metalworking Machinery. From these industries, assumptions were made regarding sales, purchases, payroll, and employee household spending. This data was entered into the economic model to determine their impact on Chesapeake's economy. The same approach was taken for the proposed retail and office uses as well. A summary of the impacts may be found within another section of this report and the detailed results are contained in the Appendix.

Residential Uses

The predominant residential land use in the study area is the single-family unit. The land use concepts presented in Alternatives "D" and "E" attempt to protect and buffer existing and future single-family areas. During the public meetings, citizens expressed their desire to maintain the single-family character of the study area.

Multi-family units, amounting to 600 units in Alternative "D" and 880 units in Alternative "E", were suggested in an area north of Portsmouth Boulevard. The reason for the multi-family units was to provide a viable housing alternative that would also support adjacent retail commercial uses. By locating these housing types north of Portsmouth Boulevard, the single-family character of the existing residential developments were maintained.

In each Alternative Scenario, pedestrian and bike trails are envisioned and noted on the plans. Recreation areas, both active and passive, are also suggested in each Alternative. The plan suggests capital investments in parks & recreation and for libraries.

Residential land use was suggested around the Dock Landing Road Interchange areas for several reasons. Dock Landing Pointe had recently applied for and received subdivision approval for this area. The front portion of the land on the eastern side of I-664 would be part of that tract and it was assumed that the rear portion would be residential given the character of the uses locating there.

On the western side of the I-664 Interchange on Dock Landing Road, the existing land uses are predominantly residential on the south side of Dock Landing. On the north side of Dock Landing Road, Old Woodland Estates subdivision has established the residential character for this area. Given these considerations and the fact that the study area was also served by Pughsville, Portsmouth Boulevard, and the Bowers Hill Interchanges, no use other than residential was considered for the Interchange area. Access to the remaining undeveloped land on the western side would be difficult from Dock Landing road because of its elevation from the I-664 overpass. Site access from Jolliff road would intrude on the residential character of the area.

Economic Development Strategies

Implementing either Alternative “D” or Alternative “E”, will assist the City in adding to its tax base, while protecting existing land use characteristics of those who are already present within the study area boundaries. These two alternatives support the development and maintenance of a competitive business climate and respond to two major factors that influence the growth and development of the study area. These factors are transportation and communications infrastructure.

In seeking a strategy and plan to attract and support the commercial and industrial development proposed in the Western Branch Study Area, consideration must be given to several major areas. To attract business and industries that provide excellent wages and benefits, local infrastructure and an educated workforce must be readily available. Fortunately, the City’s schools have done well in preparing students for college, technical schools, or employment. The Chesapeake school system ranks high in performance tests used to compare performance with other schools in the region. By implementing the proposed land use plan for the study area, adequate land will be available to accommodate new business ventures locating to Hampton Roads or relocating from areas within the region.

Any strategy must take into account potential “catalysts of change” that may occur with the region. These changes might have positive or negative impacts on the existing conditions. Several “changes” that should be considered include regional growth rates and projections; the capture percentage of projected non-residential growth anticipated to occur within the City, and that which could be attracted to the study area from elsewhere in the region; the growing strength of the I-664 corridor; regional roadway congestion and travel uncertainties; improvements and increased use of the Route 58/Route 460 corridor; and the dynamics of competition from growing neighboring communities.

"Bandwidth" investments in the Gateway Commerce Park area, Portsmouth Boulevard area, and the Route 58 corridor would serve both the office, commercial, and industrial uses envisioned in the Plan. High Technology companies rely on integrated telecommunications networks to obtain information on markets and orders, adjust their product designs and product runs, manage materials and inventory, and deliver their goods quickly. Administrative control centers, manufacturing operations, and distribution facilities are increasingly using advanced computer technology and robotics to perform simulated product design, virtual prototyping, concurrent or simultaneous engineering, and motion planning to reduce design and production cycles and increase their flexibility to meet customer orders. Available access to the information superhighway through a network of multimedia communications devices such as fiber-optics, cellular connections, and satellite linkages connecting companies to their customers and suppliers and to their own branches, offices, subsidiaries, and business partners is prerequisite to their success and survival. By investing in and providing access to "bandwidth" at the suggested Western Branch locations, Chesapeake could accelerate location decisions by private companies for office, manufacturing, and distribution facilities.

Shell building investment can also be a stimulus to location decisions by private industries for a number of reasons. The investment is also revolving, in that the money invested is paid back when the building is sold. For example, James City County invested in a 60,000 square foot building in the Stonehouse Business Park. The park is located in the upper county on the New Kent County municipal boundary and was privately developed. Although the shell building sat vacant for six (6) years until it recently sold, it served as a catalyst for industrial location. The first company that it attracted was Solarex, a manufacturer of flexible film solar panels. This company opted not to purchase the shell building, but to construct its own building across the street from the County's shell building. Several small manufacturing companies were also drawn to the park as a result of touring the shell building. All chose, however, to construct their own facilities ranging in size from 30,000 square feet to 45,000 square feet. When John Deere chose to locate in the park, they leased the shell building while they constructed their 300,000 square foot manufacturing facility. A major consideration for their location decision was that they could establish operations in the shell building while their facility was under construction. Solarex recently purchased the shell building for their research and development center, as part of their expansion program. Although the Stonehouse Business Park was private owned, the County, through its IDA, was able to partner with the owners to attract high quality manufacturing investment for the municipality.

The Hampton Roads Executive Airport is anticipated to continue operations. Plans for the expansion of the runway paralleling Route 58 are being considered and endorsed by federal and state aviation agencies. To capitalize on this, the proposed Western Branch Land Use Plan seeks to locate office/manufacturing/distribution or flex space facilities and hotel uses near the airport. The uses would serve private corporate aviation activity as industry representatives visit local operations or the operations of their business partners in the Hampton Roads area. Hotels would provide short-term accommodations and meeting rooms for aircrews and corporate personnel. The flex space would provide the office, manufacturing, and distribution space for those industries requiring access to general aviation service. Possible specialized trade show or merchandise display activities might use these facilities to present demonstrations of manufacturing procedures or product lines to corporate executives, who have limited time availability enroute to other destination points.

Because of the strength of the I-664, the increasing importance of the Route 58/Route 460 corridors, and the possible development of the Pleasant Grove Connector, destination activities such as sports complexes or other regional attractions were considered in the plan around the Bowers Hill area. The City should give serious consideration to maximizing the development potential of this area.

Considerations

By identifying the desired land use opportunities within Western Branch, the City provides notification to private and public sector investors of Chesapeake's desired economic development objectives.

By anticipating the infrastructure requirements needed to support the proposed development within the study area, the City will reinforce the attractiveness of making commercial and industrial investments in the study area.

By considering City investment in the necessary "bandwidth" and/or "shell building" infrastructure, the City can accelerate the timing of development.

By encouraging the placement of high capacity "bandwidth" via cable or wireless transmission can only serve to add to the study area's competitive advantage. Discussion should be initiated immediately with the industry providers of these technologies, so as to allow them to incorporate these commitments into their planning and implementation process. Consideration should be given to establishing partnerships with the industry providers to better plan the timing of these services.

By supporting partnerships with the Chesapeake schools, Tidewater Community College, Old Dominion University, and other institutions of higher learning, provisions for an available trained workforce would be facilitated. The benefits of participating or developing such program relationships would be to serve as a recruitment incentive complementing the City's economic development efforts.

By appointing a Western Branch Commerce Development Coordinator, the City could focus on the requirements of marketing, coordinating, and implementing the various aspects associated with implementing this plan.

By developing performance standards and/or design guidelines for planning, architecture, landscape architecture, engineering, and construction, a unique development theme or community design style could announce entry into and enhancement of this gateway corridor.

By preparing an active marketing program specifically for the study area, the City could actively educate the regional and state economic development organizations to the overall development potential.

By securing rights-of-way and/or easements for intercity and intra-regional rail transportation, the City would ensure that the study area would not be by-passed by future mass transit investments.

By implementing a bikeways and pedestrian ways plan for the study area, the City can ensure continued and improved "quality of life" standards within the study area.

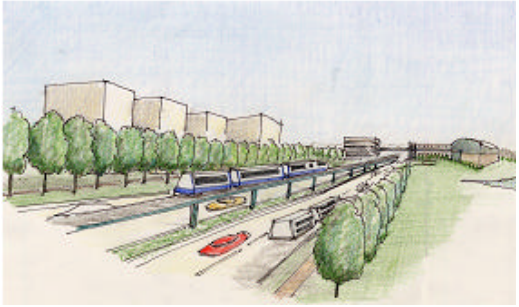
By leveraging the existing historical sites within the study area, the City could expand its park and recreational resources.

By investigating the establishment of a "technology zone" by ordinance, the City could assess the benefit to be derived by this targeted approach in stimulating high tech industry development within the study area.

Development Vision

To assist the City and the public to envision what the proposed land uses might be able to attract, BTG prepared renderings of a portion of the study area that illustrate one vision of the development that could result. These renderings are included below.

Area Concept Plan



Future Transportation Concept

Future Commerce Park Concept

Street-Scape Concept