

Based on this analysis the Comprehensive Plan's Land Use Plan (Chapter 3) does not designate large additional areas of land for employment or commercial use. During the Comprehensive Plan process several participants questioned some of the assumptions in the analysis suggesting that demand for employment and commercial land will be higher than stated. A few participants also questioned whether the undeveloped employment and commercial land supply is well located in relation to demand and truly available for development. A future study to assess the County's inventory of employment and commercial land is recommended. (see below under Actions).

In addition to the land availability, a variety of other factors influence Charles County's ability to attract high quality businesses. Good schools, a wealth of community amenities and a distinct community character and identity all play a role in business attraction. (See Appendix "B" for the Land Use Market Supply & Analysis).

Mineral Extraction

Sand and gravel are Charles County's only significant mineral resources. Upland deposits consist of thin layers of sand and gravel, and can be found across much of the County. Lowland deposits consist of river-bottom sediments and several levels of terraces flanking the Potomac, Port Tobacco, and Wicomico Rivers.

As of June 2012, there were 21 mining permits in the County issued to 12 separate operators. Between 2003 and 2011 production amounted to approximately 18.3 million tons an amount representing around 14 percent of statewide production⁴.

The County Commissioners created a Sand and Gravel Task Force in 1998 to evaluate the county's regulatory policies against any significant issues related to sand and gravel surface mining. As part of the Task Force's research, a Sand and Gravel Mining Industry Impact Analysis were prepared (RESI, 1999). The analysis concluded that the industry was one of the County's leading export industries, representing three percent of the total value of goods and services produced in the County (approximately \$53 million) in 1997. A number of sub-industries derive much business from the sand and gravel industry including the trucking, wholesale trade, and engineering industries.

Planning tools & regulatory controls

At the State level, surface mining is regulated under Title 15 Subtitle 8 of the Environment Article, Annotated Code of Maryland. This law is administered by the Maryland Department of the Environment's Minerals, Oil and Gas Division. Any person intending to mine sand and gravel must first obtain a Surface Mining Permit from the Division. Licenses must be renewed on an annual basis. On completion of the mining operation, the site must be reclaimed in a fashion satisfactory to the Division.

At the local level, surface and sub-surface mining including wells for oil, natural gas or petroleum are regulated in Charles County through the Zoning Ordinance. Mining is

⁴ Maryland Department of the Environment Mining Program, personal communication June 6, 2012.

permitted by special exception in all zoning districts with the exception of the RV, RO, CB and PRD districts. Wet processing can be performed in conjunction with surface mining or can be stand alone, again by special exception. A request for special exception must be filed with the Board of Appeals. The Board then reviews the request to determine if the proposed use conforms to all requirements of the Zoning Ordinance.

As part of the special exception request, the applicant must submit a site plan of the operation, proposed buffers and screening, and any other pertinent information. In most cases, special exceptions are limited to a period of three to five years (renewable) for the extraction and removal of mineral resources. The St. Charles Planned Unit Development (PUD) is regulated under the applicable St. Charles Master Plan. The entire zone and surface mining is not regulated by the Board of Appeals. The Charles County Critical Area Program contains specific goals and objectives regarding mining in the Critical Area. The Critical Area Overlay Zone, in the Zoning Ordinance, contains requirements over and above those required by the special exception process.

Extraction operations generate sizable amounts of truck traffic and related truck traffic problems are a key concern to County residents in regards to this industry. Some communities desire that haul roads within the extraction sites are located in such a fashion that they stay away from adjoining property. This action helps contain noise associated with the operation, but does not address the hauling of mineral resources on County and State roads where related noise and safety are also concerns.

Agriculture, Forestry, Fisheries

Agriculture

The 2007 United States Department of Agriculture (USDA) Census of Agriculture counted 52,147 acres of farmland in Charles County, on 418 farms, for an average farm size of 125 acres. The total acreage is an increase of approximately 100 acres from 1992. This represents a notable trend because it is the first census year, since at least 1950, when the amount of farmland in the County did not decline. The Census reported the market value of all Charles County's agricultural products sold at approximately \$8.9 million, with 74 percent of the farm income derived from field crops and 26 percent from livestock enterprises. Tobacco, once the County's most valuable crop, while still grown, has become statistically insignificant. Charles County is characterized by relatively small farms compared to the large grain farms of the Eastern Shore or the dairy and livestock farms of Central and Western Maryland. Over half the farms in the County are smaller than 70 acres. The 2012 Charles County Land Preservation Parks and Recreation Plan include a detailed profile of agricultural land.

While no longer a major employer of residents, agriculture in Charles County and Southern Maryland occupies a special economic and cultural niche in the state's agricultural base. A number of Amish-owned farms exist in eastern Charles County, which are part of a larger community that extends into St. Mary's County. The Amish community is an important part of the local agricultural economy.

Farming is a business, and it needs to be viable from an economic standpoint in order to continue in Charles County. Simply put, farmers need to earn more in revenue than they expend in costs. They need to have a remaining level of profit sufficient to justify the risks of that business, such as: crop loss, unanticipated costs for equipment, building repairs and replacement; as well as changes in demand or pricing between sowing and harvest. As part of the 2013 Comprehensive Plan update, the County commissioned an evaluation of Charles County Agriculture⁵. The evaluation included the following statements:

- Charles County agriculture is likely to continue to be driven by a small number of large farms that produce grain and a growing number of small farms that produce nursery, greenhouse, and vegetable crops and provide agri-tourism opportunities. Charles County has the advantage of proximity to the Washington, DC metro region, which features affluent consumers who value fresh-grown produce and horticultural plants.
- The profitability of the farming industry is essential to the preservation of agricultural land that the County hopes to achieve. The County can help the farming industry through: 1) removing land use regulatory barriers to on-farm enterprises; 2) marketing; and 3) farmland preservation, including both the transfer of development rights and the purchase of development rights.

The Southern MD Agricultural Development Commission (SMADC) associated with the Tri-County Council for Southern Maryland and funded with tobacco settlement funds, is coordinating the transition away from the tobacco heritage to new market-driven agricultural enterprises. The Commission’s key strategies include training, buying local agricultural products, and encouraging alternative crops.

Forestry, Timberland

Charles County historically has been one of the leading producers of saw timber in the State. As noted in Chapter 2, forested lands are the dominant land use in Charles County comprising approximately 56 percent of the land area. These forestlands are often found on farms. In 2008 Charles County ranked 2nd in the state for industrial hardwood production and 6th in the state for timber production (Table 7-3).

Table 7-3 Industrial Roundwood Production

	Industrial roundwood production, (thousand cubic feet)		Charles County as % of State	Rank in State
	Charles County	Maryland	Total	
Hardwoods	1,816	19,089	10%	2nd
Softwoods	200	10,010	2%	8th
Total	2,016	29,099	7%	6th

⁵ An Evaluation of Charles County Agriculture and Recommendations for Agricultural Economic Development, July 2011. Thomas Daniels, PhD, Professor of City and Regional Planning, University of Pennsylvania.

Notes: Industrial roundwood production is the quantity of industrial roundwood harvested in a geographic area plus all industrial roundwood exported to other geographical areas. Roundwood is Logs, bolts, or other round sections cut from trees (including chips from roundwood).

Source: Maryland Timber Industry: An Assessment of Timber Product Output and Use 2008 US Department of Agriculture Forest Service, Northern Research Station Resource Bulletin NRS-64

The promotion and development of the forest industry, in Charles County, could help landowners earn additional income from their property as well as make land preservation options more attractive. One promising activity is the certification of privately-owned forest land through third party organizations such as the Forest Stewardship Council (FSC) and the Sustainable Forest Initiative⁶. Certification means that the wood products are produced sustainably, that is in ways that maintain ecological functions. These certified wood products tend to earn landowners a higher price for their wood. There are currently about 3,000 acres of certified forest land in Charles County. A key need is wood processing facilities. There is currently one small sawmill in Charles County.

Aside from traditional forestry, forest lands provide a broad range of ecosystem services that benefit the public. In an ecosystem services market, the beneficiaries or consumers of an ecosystem service, often consisting of a business or government entity, financially compensate landowners for environmental actions, products, and performances that result in the desired service. An example of an ecosystem service is carbon sequestration. In determining a dollar value for these services, forest land preservation can provide another source of revenue for landowners. In the future, a broader range of opportunities may exist for landowners to receive compensation for the environmental services that forests provide.

Fisheries

State law requires that counties located on tidal waters include a Fisheries Element in their Comprehensive Plan. This focuses on the designation of areas for loading, unloading, processing finfish and shellfish, as well as docking and mooring commercial fishing boats and vessels.

Commercial fishing is permitted in the most of the rural zoning districts. Onsite processing is also permitted with conditions in rural zoning districts (not in village zones). Off-site processing is permitted in CC, CV, IG and some mixed use zones. Overall, there appears to be adequate land, especially in the rural areas, for facilities to support commercial operations. This ranges from docks to vessel storage to product processing and distribution.

Tourism

Charles County has opportunities to further develop its tourism attractions. This ranges from waterfront recreational areas along its extensive shoreline, to promotion and enhancement of existing historic sites. Tourism activity has the potential to increase employment in the hotel/motel, restaurant, and other service industries and is a proven job generator.

In 2012, the Charles County Tourism Destination Plan Study was completed. The three primary goals of the plan were to review an inventory of assets and attractions and to create a plan for the development of tourist destinations in Charles County. The inventory of assets

⁶ Daniels, 2011. See prior footnote.