

**STAFF PERSONS:**  
**PLANNING COMMISSION WORKSESSION:**

**ECHOLS, SORRELL, WEAVER**  
**MARCH 20, 2011**

**CPA 2013-00001 COMPREHENSIVE PLAN REVISION**

*Worksession 6 – Industrial Land Inventory, Rural Interchanges, and Locations for Industrial Uses and Target Industries*

**BACKGROUND**

The Planning Commission has discussed the inventory of residentially designated and zoned lands, potential residential expansion areas (October 11, 2011) and opportunities for more commercial uses in support of agriculture and tourism in the Rural Areas (November 29, 2011). On February 14, the Commission met with the Board of Supervisors on the Target Industry Study and both bodies were presented with information on the inventory of non-residential land and characteristics of the interstate interchanges. This worksession is a continuation of the discussion on the needs for industrial land.

**PURPOSE OF WORKSESSION**

This worksession is intended to provide information on our needs for industrial land, whether we have enough land in the right locations, and whether we have parcels of the right size for future needs.

**LAND AVAILABLE FOR INDUSTRIAL USE**

The February 14 staff report showed the amount of land both zoned and designated for industrial uses. This information has been further refined to show where additional land area could be rezoned to increase the supply. Table 1 on the following page shows that most of this additional land is in Piney Mountain and Hollymead, with additional areas in Crozet, Neighborhood 1, and Neighborhood 4. In addition, there are approximately 3511 acres of commercially zoned land with over 4.6 million square feet that has been zoned for commercial use in the last ten years. While the amount of commercially zoned land is believed to be sufficient for commercial land uses and could also accommodate some light industrial uses in the future, depending on changes to zoning allowances, the amount of commercial land that could accommodate light industrial use is unknown and will be subject to market forces.

**Table 1: Vacant Non-constrained land in Current Land Use Plan Designated for Industrial Use (by # of designated acres)\***

Development Area	Area with RA & Residential Zoning	Area with Commercial Zoning	Area with Industrial Zoning	DA Totals
<b>Crozet</b>	7.83	0	**52.89	<b>60.72</b>
<b>Village of Rivanna</b>	0	0	0	<b>0</b>
<b>Piney Mountain</b>	32.93	8.86	9.55	<b>51.34</b>
<b>Hollymead</b>	191.78	3.45	***322.98	<b>518.21</b>
<b>1</b>	6.08	12.5	0	<b>18.58</b>
<b>2</b>	0	4.9	0	<b>4.9</b>
<b>3</b>	0	0	0	<b>0</b>
<b>4</b>	11.13	1.71	36.34	<b>49.18</b>
<b>5</b>	0	0	0	<b>0</b>
<b>6</b>	0	0	0	<b>0</b>
<b>7</b>	0	0	0	<b>0</b>
<i>Subtotal:</i>	<i>249.75</i>	<i>31.42</i>	<i>421.76</i>	<i>702.93</i>
	Minus Constrained Land Area:			28.93
	<b>****Total:</b>			<b>674.00</b>

\*Land in portions of less than 1 acre in area has been excluded, totaling 29.91 acres.

\*\*Includes 2 acres of Acme Visible Records land which would not be available until 2016

\*\*\*Includes UVA Research Park

\*\*\*\*Report of 2-8-12 indicated 841 acres of non-constrained land; this figure inadvertently included 127 acres of constrained land in the UVA Research Park

## **THE NEED FOR INDUSTRIAL LAND AND TARGET INDUSTRIES**

Analysis of the County's future employment needs can provide direction on the amount of land needed for industry in general. The future need for designated land relates to many things including target industries and expectations for how industrial activities and associated land and shipping needs will occur in the future.

Staff has used two different approaches in projecting future needs. The first approach is similar to what was done for to project future needs for residential land. It should be noted that predicting the types of jobs that will be created over the next twenty years is a difficult task, given the changing world economy. Home-based businesses and telecommuting are expected to grow. It is unknown to what degree outsourced jobs such as call centers and true manufacturing will come back to the U.S. One cannot

speculate how the rising cost of fuel and shipping will affect manufacturing, which in the past few decades has tended to move to other countries. Based on the trends of the most recent past, though, staff has done some analysis to predict a need for industrial land area needs.

Using the employment projections from the Bureau of Labor Statistics, extrapolated through 2040, Albemarle will have an estimated 18,000 new jobs in the year 2030. Of those new jobs, 3,000 are expected to be industrial or “quasi-industrial” jobs which have very low floor area ratios. Land area needed for these new jobs is expected to range from 200 to 557 acres. As provided in Table 1, the maximum amount of designated land area available is approximately 674 acres; however this total assumes rezoning of all industrially designated land. Available land with existing industrial zoning is approximately 376 acres. Therefore, in order to exactly match the projected employment needs by 2030, up to 181 acres of additional zoned land will be needed from the supply of vacant industrially designated land. As previously mentioned, over the next year the County will be working to pro-actively zone land to an industrial designation to increase the supply of land available for industrial uses.

Having a supply of land for industrial uses over the next 20 years does not guarantee that the same land will meet all of the needs of future industrial users. Industrial land will need to be available which meets the needs of the targeted industries which the Board will review on April 11. Location, size, and developability are all important to consider when designating land for economic development. Once the targets are discussed by the Board of Supervisors, staff will reassess this analysis to make sure that the supply of industrial land can meet the needs of the finalized target industries. In order to keep on track with the Comprehensive Plan Update, staff is going to use the preliminary results of the study’s recommended targets in the analysis below. If the Board decides the County should be going a different direction than the direction recommended by the consultants, then additional information will be brought to the Commission later in the spring.

The recommended target industries are:

- Bioscience and Medical Devices
- Business & Financial Services
- Information Technology and Defense & Security

Complementary targets are:

- Health Services
- Arts, Design and Sports & media

Characteristics of the targets are highlighted below:

**Table 2: Target Industry Requirements**

Target Industry	Land & Building Requirements	Other requirements
Bioscience and Medical Devices	<ul style="list-style-type: none"> <li>• <b>3 to 5 acres, 1 story; 50,000 + sq. ft.</b></li> <li>• ceiling min. 9'6"</li> <li>• site must facilitate future expansion</li> <li>• High quality lighting, Sound insulation, Vibration reduction</li> </ul>	<ul style="list-style-type: none"> <li>• Industrial zoning</li> <li>• Manufacturer's needs for water, sewer, power (gas or electric), fiber optic</li> <li>• Distribution of product by truck or air</li> <li>• Desired proximity to CBIC incubator (Downtown), UVA, or UVA Research Park</li> </ul>
Business & Financial Services	<ul style="list-style-type: none"> <li>• <b>3 to 25 acres; square footage requirements vary; multiple stories are possible for many uses</b></li> <li>• Larger operations can work well with mixed use; many can use office buildings</li> <li>• Some targets can locate in larger buildings such as State Farm HQ, or office parks such as CFA HQ in Fontaine</li> <li>• A particular type, data centers, will be large one-story buildings, segregated from other uses.</li> </ul>	<ul style="list-style-type: none"> <li>• Commercial zoning</li> <li>• Most businesses have standard office needs</li> <li>• For data centers: FIBER OPTIC, large Water, Large POWER, Redundant power (batteries, generators, dual grids)</li> </ul>
Information Technology and Defense & Security	<ul style="list-style-type: none"> <li>• <b>3 to 25 acres; 10,000-50,000SF</b> – small scale, high-end electronic products manufacturing</li> <li>• Defense/Info Tech manufacturing can be accommodated into both existing office and industrial buildings</li> <li>• Not as likely to locate in mixed use.</li> <li>• Manufacturing needs high ceilings for managing equipment</li> </ul>	<ul style="list-style-type: none"> <li>• Commercial or Industrial zoning, depending on specific use</li> <li>• Product distribution of defense equipment by truck, rail or air shipment.</li> <li>• Desired proximity to UVA Research park and the Rivanna Station, but not mandatory.</li> <li>• Defense and Info Tech consulting operations require GSA development standards for terrorism security protections (distance from main roads, segregation, and minimal window exposure).</li> <li>• Manufacturers' needs for, water, sewer, power (gas or electric), fiber optic</li> </ul>
Health Services	<ul style="list-style-type: none"> <li>• <b>Avg. 3-5 acres; square footage requirements vary; multiple stories are possible for many uses</b></li> <li>• Health includes -Nursing care, residential care, continuing care retirement communities</li> <li>• Can be accommodated in mixed use, institutional or residential land uses</li> </ul>	<ul style="list-style-type: none"> <li>• Commercial zoning</li> <li>• Nursing home water use considered comparable to hotel rooms.</li> <li>• Ability to support ambulatory care and proximity to hospitals</li> </ul>
Arts, Design and Sports & media	<ul style="list-style-type: none"> <li>• <b>Acreage varies as does building size</b></li> <li>• Sports can require indoor or outdoor playing fields. Arts can adaptively re-use existing buildings</li> <li>• Design and media firms can locate anywhere</li> </ul>	<ul style="list-style-type: none"> <li>• Commercial zoning</li> <li>• Businesses have standard office needs</li> <li>• Indoor/outdoor sports may generate large amounts of traffic at peak hours</li> </ul>

In keeping with the County’s growth management policy, these uses should be located in the County’s designated Development Areas. Of these targets, only Bioscience & Medical Devices and Information Technology - Defense & Security might need land zoned for industrial use. The Office/R&D Flex/Light Industrial designation from Places 29 and an Industrial or Industrial Service Designation could be used to address needs for land area for these targets.

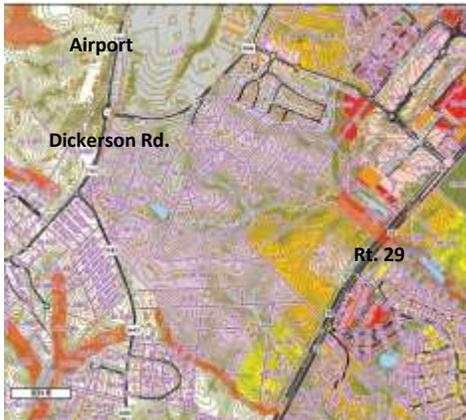
As can be seen in Table 2, the recommended target industries generally have a land area requirement of between 3 to 25 acres. While many of the industries can be accommodated in commercially zoned areas, manufacturing facilities as the primary use will require industrial zoning. Building square footage varies but can be up to 350,000 sq. ft. for larger facilities like data processing centers, corporate headquarters, or call centers. All targets have need for high-speed internet access and public utilities with some having large water and power needs. Transportation needs are specific to each business.

As stated earlier, only the Bioscience & Medical Devices and Information Technology - Defense & Security targets would appear to have need for purely industrial zoned land. Bioscience & Medical Devices have parcel requirements of 3 - 5 acres, while Information Technology – Defense & Security targets require 3 – 25 acres. The characteristics of the undeveloped industrially designated and zoned land supply is shown in Table 3 below:

**Table 3: Undeveloped Industrially-Designated Parcels (includes constrained land)**

Parcel size	Designated & Zoned Industrial (# of parcels)	Designated & not zoned industrial (# of parcels)	Total
1 to 4.99 ac.	15	21	36
5 to 9.99 ac.	11	17	28
10 to 14.99 ac.	1	4	5
15 to 24.99 ac.	1	4	5
25 ac. or more	1	1	2
Total	29	47	76

From this table, one can see that there are very few parcels available for larger land users. At present, there are only 5 parcels of land designated for industrial use in the category of 10 – 14.99 acres, 5 parcels in the category of 15 – 25 acres, and 2 parcels greater than 25 acres in size. This table does not show that several of the larger parcels are owned by the same property owner and could be combined to provide for larger



parcels, such as many of the parcels shown in purple in the map to left. Streets and road networks may need to be expanded and new roads built in order to provide access to some of these parcels near the Airport and Hollymead Town Center.

**Map to left shows area south of Hollymead Town Center and west of Rt. 29.**

### **Conclusions:**

- In terms of raw acreage with environmental constraints removed, sufficient land area could potentially exist to accommodate future needs for industrial land, if land which is designated for industrial use is rezoned. The proviso is that not all land is created equal and some parcels will need significant investment in road or utility infrastructure.
- If a target industry or employer needs a large parcel, there are fewer parcels from which to choose; although, in a few instances one owner may own a number of adjoining parcels.
- While most of the land in the Development Areas is hilly, some sites are more environmentally challenged than others, including land designated for industrial use.
- Due to their characteristics, a large number of the identified target industries actually could be accommodated in land already zoned for commercial use unless they involve manufacturing.

### **LOCATIONS FOR INDUSTRIAL USES AND TARGET INDUSTRIES**

This part of the staff report speaks to opportunities for more geographically dispersed locations for industry, in particular, the interstate interchanges. Staff has also looked at locations where larger parcels of land might be redesignated for industrial use to serve potential target industries.

#### Shadwell

The Shadwell interchange is one which has created interest among Planning Commissioners and Board of Supervisor members. It is in very close proximity to Pantops and has the presence of businesses along Rt. 250 East near the interchange and the presence of a large undeveloped site (South Lego Farm) at the southwest

corner of the interchange. The Commission and Board have considered but not approved several rezonings in this area. It was noted in Board and Commission actions that the interchange is located at the gateway to the Southern Albemarle Historic District and has several properties that have been placed under easement and are also historic resources. However, it has also been noted that this area could provide industrial land opportunities. Attachment A provides a detailed analysis of the interchange.

There are two areas of the Shadwell Interchange that have been analyzed for this report. The first is the southwest corner of the interchange, South Lego Farm, which has a large 60 + acre farm which is mostly undeveloped. The second area is the land on the north side of Rt. 250 extending from the Comfort Inn to the Hunters Way Industrial Park.

The South Lego Farm property is made up of 50 acres and approximately 25 – 30 acres appear to be developable. At present, in order to meet VDOT requirements for an entrance, two developed properties must be crossed as well as a major ravine containing a stream. Building the stream crossing is expected to be very expensive as the land drops 80 feet to the creek before rising 60 feet on the other side.

On the north side of Rt. 250, there are several residentially developed properties, some vacant properties, and businesses. Redevelopment of the residential properties would require acquisition and road construction, which will require steep road cuts.

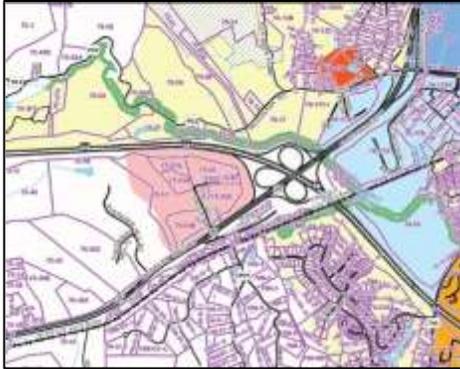
VDOT believes that significant interchange improvements will ultimately be necessary which could result in acquisition of large areas of land, possibly on both sides of Rt. 250. Such improvements may involve the provision of alternative access points to the South Lego Farm property and properties on the north side of Rt. 250 which could render some or all this property more developable. But until design plans for these improvements have been developed it is unknown what access and impacts to adjacent properties will be.

Therefore, staff does not recommend inclusion of the southern part of the Shadwell Interchange in the Development Areas for industrial development at this time. Current conditions regarding access, topography, provision of sewer service and impacts to Monticello, the Southern Albemarle Historic District, and other resources make development of these properties problematic. The lack of plans for improvements to the interchange leave questions as to what future development might be possible. Staff does see potential for this area if these issues are addressed

and recommends that this interchange area be revisited for expansion possibilities during the next review of the Comprehensive Plan. Potentially by that point design plans for the interchange improvements will be complete.

### Urban Interchanges

There are 3 ½ urban interchanges in the Development Areas. Of those interchanges, vacant land exists south of the interstate at the Rt. 29 South exit,



**Rt. 29 South and I-64**



**Fifth Street south of I-64**



**Rt. 20 South and I-64**

the southwest quadrant of the Fifth Street interchange, north of I-64 between Fifth Street and Avon Street, and in the southeast quadrant of the Rt. 20 interchange. The first two interchanges illustrated above are analyzed for potential industrial use in Attachments B and C.

The Rt. 29 South and I-64 interchange is shown for Regional Service and has a beverage distribution business and a few residences. This property has been reassessed because of the amount of vacant land near the interchange and the size of the parcels. It has fairly hilly terrain and the main problem with development is access due to VDOT entrance requirements and the steep grades adjacent to Rt. 29 South. Future improvements to the interchange will likely affect the properties, but, no necessarily provide for better access. Staff believes that the access issues must be overcome for any more intensive use of the property, regardless of the use. If either industrial or commercial development is desired, the development area boundary should be extended west to provide better options for access. Otherwise, the only place for access that can meet VDOT entrance requirements is through the ravine that has been designated for preservation. Even in this case, extensive grading will be needed, which will reduce the amount of developable land.

Staff believes that the area could provide for greater opportunities for industrial development; it is essential that there be property owner support. At present, the

owner of a large portion of the property is not in favor of a redesignation to allow for industrial development. If there was support, it would be advantageous to be able to use Shepherd's Hill Road for upgraded access to the area. Use of Shepherd's Hill Road also requires property owner support. Without resolution of the access issues, very limited development can take place in this area.

The Southpointe property is located in the southwest quadrant of I-64 and Fifth Street Extended. It is wooded with a few areas of critical slopes and has approximately 12 – 15 acres of developable land. Though zoned R15, the property is designated for Community Service and the owner desires to retain this designation. Re-designation to an industrial use was not generally supported by attendees at the Neighborhoods 4 & 5 meeting on March 8.

The property was designated for Commercial Service in 1998 when it was viewed that residents in the southern part of the County needed access to shopping south of I-64. Staff believes that this site could be used either commercially or industrially. If the property were to be redesignated to an industrial use, other commercial property may need to be designated in the southern urban neighborhoods to provide service to residents south of I-64. A redesignation for industrial use, however, should be supported by the property owners, which is not the currently the case.

The Fifth Street – Avon properties, which are not shown on the maps above, are located north of I-64 and are also primarily vacant at this time. Shown for regional service, these properties were rezoned for a retail and office type development including big boxes. In 2003, the Comprehensive Plan was amended to allow for Regional Service. Subsequent to that, the properties were rezoned for a commercial use with a plan for development. Although the Comprehensive Plan had changed, the text of the Land Use Plan for Neighborhood 4 contemplated a potential designation back to industrial use, should the commercial designation not be used.

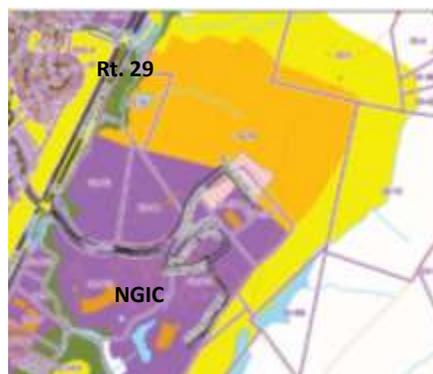
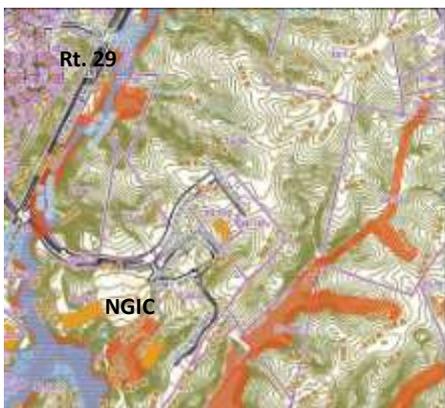
At this time a request to modify the rezoning plan for development is under review for the Fifth Street – Avon project. Staff believes that a change to the Comprehensive Plan designation is not appropriate at this time as the owner appears to be developing under the existing zoning. However, if the commercial development does not take place, this property should be considered for a reversion back to an industrial designation.

The southeast quadrant of the Rt. 20 interchange is the old Blue Ridge Hospital site for which the owner, the University of Virginia Foundation (UVAF), would like an

institutional designation. County staff will be working with UVAF staff during Area B discussions about future use of the property and whether a designation similar to the UVA Research Park or Fontaine might be better at this time.

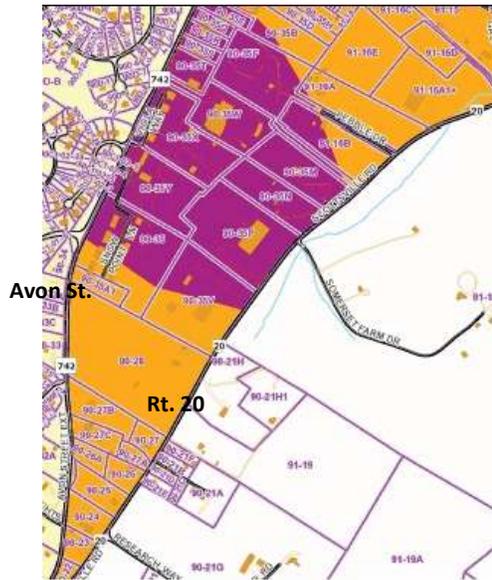
#### Other locations – Boulders Road Area

As mentioned earlier in the report, there is a need for large parcels that could serve potential target industries. In looking for large vacant parcels which might offer opportunities for redesignation, one area has emerged. That area is the land near NGIC in Places 29 which is currently designated for urban density use. As one can see in the images on the prior page, there are large parcels of land with limited environmental constraints near the NGIC facility off of Boulders Road. These parcels are designated for residential development. While it is important for residential development to be near employment centers, it is possible that some of the residentially designated areas could be reduced in size to offer greater industrial opportunities at this location. If the Board of Supervisors endorses the recommended targets, staff believes the Boulders Road area should be considered for redesignation.



#### **Boulders Road area near NGIC**

Neighborhoods 4 and 5 are also under review for potential industrial designations and the only area which appears to hold opportunities for redesignation is in the area before the intersection of Avon Street Extended and Rt. 20. These properties are shown on the following page. One large (12 acre) parcel south of Snow's Landscape and Garden Center on Avon Street Extended may provide further opportunities for industrial development or designation. The property owner has not yet been contacted about this possibility, but will be contacted prior to the Commission meeting. No other large parcels, other than those described at the interchanges, appear to have potential for redesignation in Neighborhoods 4 and 5.



### Properties between Avon Street and Route 20

#### Rural Interchanges

The February 14 staff report provided the characteristics of the rural interchanges for review. The south side of the Shadwell interchange has already been addressed earlier in this report. The Boyd Tavern/Blackcat Road Interchange and the Ivy Interchange are the most rural. The Crozet/Yancey Interchange has characteristics that are different from the other two interchanges.

The existing Comprehensive Plan does not recommend any additional development at the rural interstate interchanges; however, both the Planning Commission and Board of Supervisors have asked that this policy be revisited. In particular, the two bodies have suggested that the rural interchanges be available for uses that have a relationship to the rural and agricultural economy and have low impacts.

Characteristics of the uses which have been mentioned for the rural and agricultural uses at the interchanges are:

- Low traffic generation
- Minimal or no need for water and sewer such that there would be no future demand for public utilities
- A small scale (building and parking footprint)
- Could meet VDOT access requirements

- Would have little to no impact on natural resources
- Could meet Entrance Corridor Guidelines
- Are enhanced by having access to the interstate for distribution of products
- Little to no impact on nearby historic or scenic resources

Staff believes that these characteristics could be included in a new policy for the rural interchanges. If adopted, they could provide guidance for development decisions and/or changes to zoning regulations. Show grounds, custom slaughterhouses, sawmills, packing plants, and special events are currently allowed by special use permit in the RA and may be particularly appropriate at interstate interchanges. Other potential uses, could include:

- Small storage and distribution facilities that relate to local agricultural or forestry production
- Landscape services
- Wholesale nurseries

One other use for consideration does not necessarily relate to agriculture, forestry, or agri-tourism uses. Contractor's storage yards are important to the County's overall economy but are not allowed in the Rural Areas. Some contractor's storage yards could meet all of the characteristics recommended for rural and agricultural uses at interchanges and benefit from a location at an interchange.

An applicant for a Comprehensive Plan change has requested that mini-warehouse use be allowed at the Shadwell interchange. This use is allowed in the Development Areas but not the Rural Areas. While this use typically does not have a relationship to local agricultural or forestry production, there might be instances where such a use could be appropriate in the Rural Areas. Places which immediately come to mind are cross-roads communities; however, interstate interchanges might also be viewed as appropriate because of proximity to major roads. If located on Entrance Corridors, these facilities would need to meet Entrance Corridor Guidelines.

Staff believes the Crozet interchange would be better location for such uses with low impacts due to the size of the roads at the interchange. The Crozet exits connect I-64 directly to Route 250. Because of the very rural nature of the Ivy and Boyd's Tavern interchanges, future development that could meet all of the potential use characteristics for rural interstate interchanges is less likely.

## Conclusions

- Needs for future industrially designated and zoned lands depend on the types of business and industry which the County would like to support.
- There are a number of parcels to support those industries, but there are not many large parcels; most of the industrially designated land is in Places 29.
- Vacant land at the southwest corner of the Shadwell Interchange would be extremely difficult to develop at this time.
- Vacant land at the urban interchanges designated for commercial uses appears to be able to support industrial uses as well.
- Access to properties at the southwest corner of Rt. 29 and the I-64 interchange will be problematic unless changes to the Land Use Plan occur, either to remove language related to preservation of a ravine or to expand the Development Area boundary.
- The owners of properties at the urban interchanges do not wish to change to an industrial designation. Without owner consent, rezonings to industrial designations will likely not occur. The Comprehensive Plan could contain language which would be supportive of commercial or industrial uses at these locations to open up future opportunities for development.
- There may be additional opportunities to designate land for industrial use in Neighborhood 4; however, the parcels would not be large and residents have concerns about impacts.

## Recommendations

Staff recommends that the Commission direct staff to prepare draft Comprehensive Plan documents to reflect:

1. The urban interchanges, other than Pantops/Shadwell, should be available for office/R&D/flex/light industrial uses as well as commercial uses.
2. Expansion of the area near the Rt. 29 S/I-64 Interchange in the southwest quadrant to allow for road access into the site.
3. Enlargement of the area designated for office/R&D/flex/light industrial uses near NGIC in the Places 29 Master Plan.
4. Changes to the interstate interchange policy to allow for rural and agricultural uses at the interchanges that have
  - Low traffic generation
  - Minimal or no need for water and sewer such that there would be no future demand for public utilities
  - A small scale (building and parking footprint)
  - Could meet VDOT access requirements

- Would have little to no impact on natural resources
  - Could meet Entrance Corridor Guidelines
  - Are enhanced by having access to the interstate for distribution of products
  - Little to no impact on nearby historic or scenic resources
5. Allowance for contractor's storage yards and mini-warehouses in the Rural Areas under these conditions:
- Low traffic generation
  - Minimal or no need for water and sewer such that there would be no future demand for public utilities
  - A small scale (building and parking footprint)
  - Could meet VDOT access requirements
  - Would have little to no impact on natural resources
  - Could meet Entrance Corridor Guidelines
  - Little to no impact on nearby historic or scenic resources

Any recommendations for expanding the industrial designation between Avon Street Extended and Rt. 20 south of the interstate will come after additional meetings with Neighborhoods 4 & 5.

#### **ATTACHMENTS**

[Attachment A – Analysis of Shadwell Interchange](#)

[Attachment B – Analysis of Rt. 29 South Interchange](#)

[Attachment C – Analysis of Fifth Street south of I-64 Interchange](#)