

ELEMENT 5 REGIONAL DEVELOPMENT AND EXISTING LAND USE

Information regarding historical growth patterns and existing land use are other essential components of the Regional Growth Management Plan. If continuously updated and maintained, existing land use information represents an important benchmark for analyzing historical growth and determining current and future land use patterns. Existing land use studies also provide a basis for more quantitative descriptions of changes in regional and sub-regional land use patterns. When incorporated into the overall planning process and monitoring activities, existing land use studies offer an opportunity to evaluate plan implementation performance and determine whether development is consistent or departing from land use planning policies.

Existing Land Use and the Regional Growth Management Plan

Reliable existing land use data, collected in a standard format and areawide basis are absolutely essential to the formation of a land use plan. At the onset of Element 5 activities, individual County level land use data was determined to be inadequate for a multi-county regional plan. Each County's data set was determined to be at varying levels of detail and completeness. In response to the existing land use data deficiencies, the TCRPC initiated an extensive effort, to systematically examine and improve the County land base data sets for the Regional Growth Management Plan project. As discussed in Elements 2 and 3, a primary issue of the Regional Growth Management Plan is to determine the sufficient amount of land needed for housing that is sufficient for the population and housing needs anticipated in the year 2020.

Existing Land Use Inventory for 1997

From November 1996 to June 1997, existing land use (ELU) data was compiled and prepared for the Regional land use study. Due to limited time and financial resources available, the mission of this project was to use a variety of data resources to verify and rectify each County's ELU data to form a more consistent regional land use map. In this context, the term rectify refers to the process of examining the respective County and municipal land use information in mapped and digital form using TCRPC's Geographic Information System and correcting the most drastic and noticeable changes. During the process, individual municipal land use data was also examined for accuracy and completeness based on recent comprehensive plans, land use studies and staff knowledge. Systematically, the County ELU data were carefully assessed to determine whether the land use information was graphically accurate in conjunction with the map's scale. To date, the data collected in 1996-1997 is the most comprehensive existing land use data available.

EXISTING LAND USE STUDY RESULTS

The area of Cumberland, Dauphin and Perry Counties exceeds 1 million acres. While the size of the region will likely not change, the Region has a growing urban area representing a variety of urban, suburban and rural areas within its boundaries. While certain areas are experiencing rapid growth, there are other vast areas of pristine rural and forested lands highly inaccessible. Based on data generated from the ELU Study, 28.89 percent of the entire Tri-County Region is comprised of residential, non-residential and public park lands. The remaining land is vacant land, farmland and/or land developed at such low-density that existing land uses were not detected in this study.

For purposes of the Regional Growth Management Plan, Element 5 inventoried land devoted to the following general land use categories:

- Residential;
- Commercial and services;
- Industrial;
- Transportation;
- Public and semi-public

The total developed land in the Tri-County Region is 301,173 acres, remembering that this study was completed in 1997. The largest land use category is the public/semi-public with 192,191 acres. Public/Semi-public land uses include public land and special uses. Due to the large tracts of State Forests and State Game Lands present in the Region, the Public/Semi-Public land use category constitutes nearly 64 percent of the Region's developed areas.

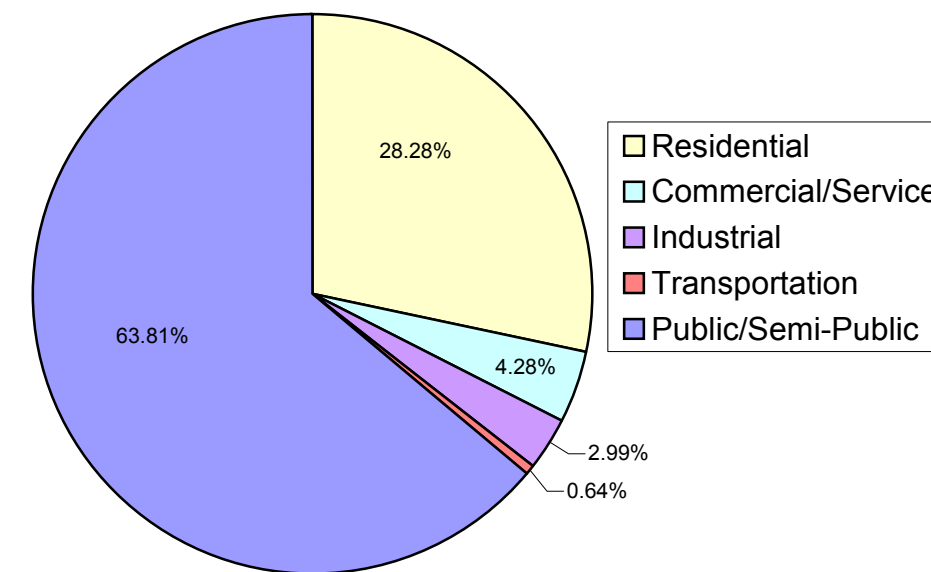
TABLE 5-1 also reveals data of other land use categories typically associated with development. In the Tri-County Region, the largest existing land use category comprising urban development is the residential category with 85,166 acres. Residential uses comprise approximately 8.17 percent of the Region's total land area and 28.28 percent of all developed land in the Region as can be seen in **CHART 5-1**. The commercial/service, industrial and transportation categories constitute the smallest areas of urban land uses.

TABLE 5-1 Existing Land Use - Tri-County Region - 1997

Land Use Category	Developed Acres	% of Developed Land in Region	% of Total Region Land Area
Residential	85,166	28.28%	8.17%
Commercial/Service	12,879	4.28%	1.24%
Industrial	9,003	2.99%	0.86%
Transportation	1,933	0.64%	0.19%
Public/Semi-Public	192,191	63.81%	18.43%
Total Developed Land	301,173	100.00%	28.89%
Total Land Area in Region	1,042,624		100.00%

Source: Tri-County Regional Planning Commission, Atlas GIS 1997

CHART 5-1 Percent of "Developed" Land Categories



County land use summaries on **TABLE 5-2** reflect several notable trends. With approximately 15 percent fewer residents than Dauphin County, it might be expected that Cumberland County would have less land area devoted to residential development. However, this is not the case. Dauphin County's more urban residential development pattern occupies 9,519 fewer acres for a larger residential population. In the commercial and service categories, it is likely that the City of Harrisburg and several concentrations of retail shopping and service uses elevate these categories in Dauphin County. Industrial warehousing uses and trucking industries being land intensive appear to be contributing to a larger area in Cumberland County.

TABLE 5-2 Existing Land Use – In Each County - 1997

Land Use Category	Cumberland	% of County Developed	% of Total County Land	Dauphin	% of County Developed	% of Total County Land	Perry	% of County Developed	% of Total County Land
Residential	40,866	38.97%	11.61%	31,347	26.44%	9.32%	12,953	16.66%	3.66%
Commercial/Service	4,539	4.33%	1.29%	7,558	6.37%	2.25%	782	1.01%	0.22%
Industrial	5,634	5.37%	1.60%	3,219	2.71%	0.96%	150	0.19%	0.04%
Public/Semi-Public	52,940	50.49%	15.03%	75,385	63.58%	22.42%	63,866	82.14%	18.03%
Transportation	876	0.84%	0.25%	1,056	0.89%	0.31%	0	0.00%	0.00%
Total	104,855	100.00%	29.78%	118,565	100.00%	35.27%	77,751	100.00%	21.94%

Source: Tri-County Regional Planning Commission, Atlas GIS, 1997

For graphic illustration, **MAP 5-1** graphically depicts the 301,173 acres of developed land as determined in the existing land use survey. For a more detailed presentation of the land use patterns in the Region, **MAP 5-2** illustrates the detailed land use categories as determined in the 1997 ELU update.

It is important to note that the 1997 existing land use study is a snapshot in time and that land uses are continuously changing. Land uses in any region are based primarily on the demand in the market and human preference, both of which are exceptionally difficult to measure. This should be taken into account in County and Municipal land use plans that project for the next 20 years, not total build out.

DEVELOPED LAND - LAND USE CATEGORY SUMMARY

Because the ELU Study was completed in conjunction with the County land use update efforts, the Regional land use data used in Element 5 is also applicable in each of the respective County’s comprehensive plans. Unfortunately, the County’s have not used an identical land use-inventorying scheme to the point where ELU mapping methods, level of detail and coding schemes, may be completely interchangeable. Therefore, ELU inventorying activities in one County may vary slightly for another. The ELU for the Regional Growth Management Plan must be used with this in mind. The following sections have been prepared to provide an overall supporting explanation to the land use categories presented on **TABLE 5-1** and **TABLE 5-2** and mapped on **MAP 5-1** and **MAP 5-2**.

- **Developed Land**
Developed land as depicted on **MAP 5-1** and the colored areas on **MAP 5-2** represent those areas of the Region devoted to some form of development where houses or buildings have been constructed in compact groups or land use (i.e. State Game Land). Parcel level detail was difficult to achieve on a County and Region wide basis. However, where municipal data was available, it was incorporated into the land use database and used in the study. On **MAP 5-1**, all developed land is represented in gray. On **MAP 5-2**, individual land uses were depicted in the color scheme indicated.
- **Residential Land**
Residential land use category includes the land actually occupied by the residence or under development. In dense areas, residential land may have also included vacant building sites between existing residences.

- **Commercial and Service**
Commercial and service uses include all types of retail and service oriented commercial uses. These areas may include neighborhood, community and major regional shopping centers, select recreational uses, highway oriented commercial activities, professional offices, office complexes and similar uses. In general all amenities related to these uses (i.e. parking) are included.
- **Industrial**
Industrial lands include all space used for manufacturing, flex space, wholesale, distribution and warehousing/storage. Like Commercial and Service, amenities such as off-street parking, truck parking, loading and unloading are included in the land use category.
- **Transportation**
The transportation category constitutes railroad yards, trucking yards and other similar transportation facilities.
- **Public - Semi-Public**
The public semi-public category includes land occupied by governmental and institutional facilities which include government buildings and land, public and quasi-public institutions, some government buildings for County and municipal governments, schools, colleges and universities, museums, hospitals and religious organizations. The category also may include public and private golf courses and Federal, State and local Parks, Forests and Game Lands.
- **Vacant Lands**
The vacant lands depicted as white areas on **MAP 5-1** and **MAP 5-2** represent land not being used for development. In more urban concentrations in the Region, these areas are generally left as open land due to environmental constraints or speculation. They may be wetland, woodlands, steep sloped areas that have not been developed for, or otherwise committed to a specific land use or development.

In less urban areas west of Carlisle, northern Dauphin County and Perry County, a large portion of these vacant areas include cropland, pastureland, orchards, nurseries and land used for other agricultural activities. In mountain areas, not included in PA State Game lands and forests, woodlands and heavy brush comprise a significant percentage of these areas as well.

Vacant Land Parcel Studies

TCRPC staff inventoried and graphically displayed (**MAP 5-3**) vacant parcels of one acre or more from each of the county tax assessor offices. Cumberland and Perry Counties made this information available through databases that linked to TCRPC’s geographic information system. This same information was not available in a database format from Dauphin County, therefore TCRPC utilized the annual realty atlas (volume 29, 2002) distributed by the tax assessors office in conjunction with Dauphin Counties parcel information website (www.dauphinpropertyinfo.org). All data from the county tax assessor offices was from the year 2001. The area calculated from these vacant parcels determined the potential amount of new development, infill and/or redevelopment in areas where services already exist.