

INTRODUCTION
Prospect is an incorporated city of Louisville (figure 1) and is approximately 4.28 square miles in the Kentucky counties of Jefferson and Oldham. It occupies 4.23 square miles in Jefferson County. The topography can be described as flat for the most part with a few hills. Prospect has a lot of new growth development over the last several years. Farmlands, forested areas and pastures are being converted into luxury home subdivisions. This has led to an increase in the population and a decrease in habitats for wildlife that live in the surrounding areas. It is a desirable place to live and the intensity of urbanization will continue to increase over the coming years. This is demonstrated by the increase in property values and the increase in population that has occurred over the past few years. Those who live here have a higher than average median income than the rest of Kentucky.

OBJECTIVE
The purpose of this GIS study is to illustrate the increased development that has occurred in Prospect that is contained in only Jefferson County (figure 2). This will be done by comparing and calculating the percentage change for land use from the year 2001 to 2005. There is a decrease in land use that is marked forest and an increase in land use that is categorized as developed.

STUDY AREA
This study will focus specifically the portion of Prospect that is contained within Jefferson County – Figure 1.

PROCESSING STEPS
The Land Use polygon data was obtained from the Kentucky Office of Geographic Information Geoportal for the years 2001 and 2005 – Figures 3 and 4. For each year, land use type was extracted and put into new data layers. The resulting data layers were then superimposed to show the change that had happened between 2001 and 2005 – Figure 5. Finally, all the types of land use were calculated in terms of percentage for each year and the areas that had some change were highlighted

RESULTS
From the year 2001 to 2005, developed land categories increased while there was some decrease in other types of land use categories. As illustrated by Tables 1 and 2, the following category showed a large increase: Developed, Medium Intensity- 2%

CONCLUSIONS:
The amount of developed land increased by a total of 2.78% from 2001 to 2005. As property values continue to rise for this area in the next few decades, we will see a continued increase in development and a decrease in the amount of forests that exist in the area.

Reference: <http://www.city-data.com/city/Prospect-Kentucky.html>

Land Use Change, Prospect, Jefferson County, Kentucky 2001-2005

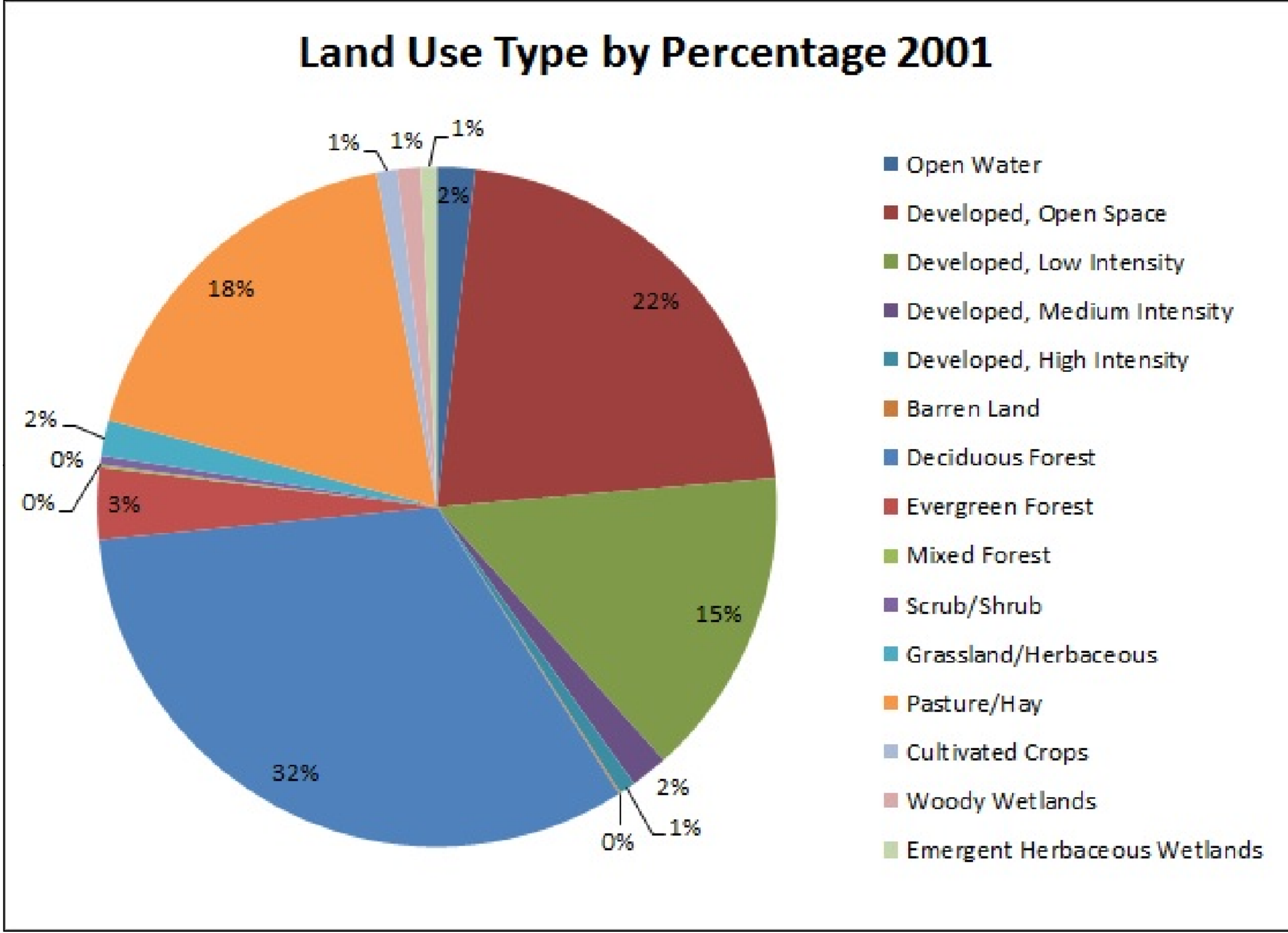
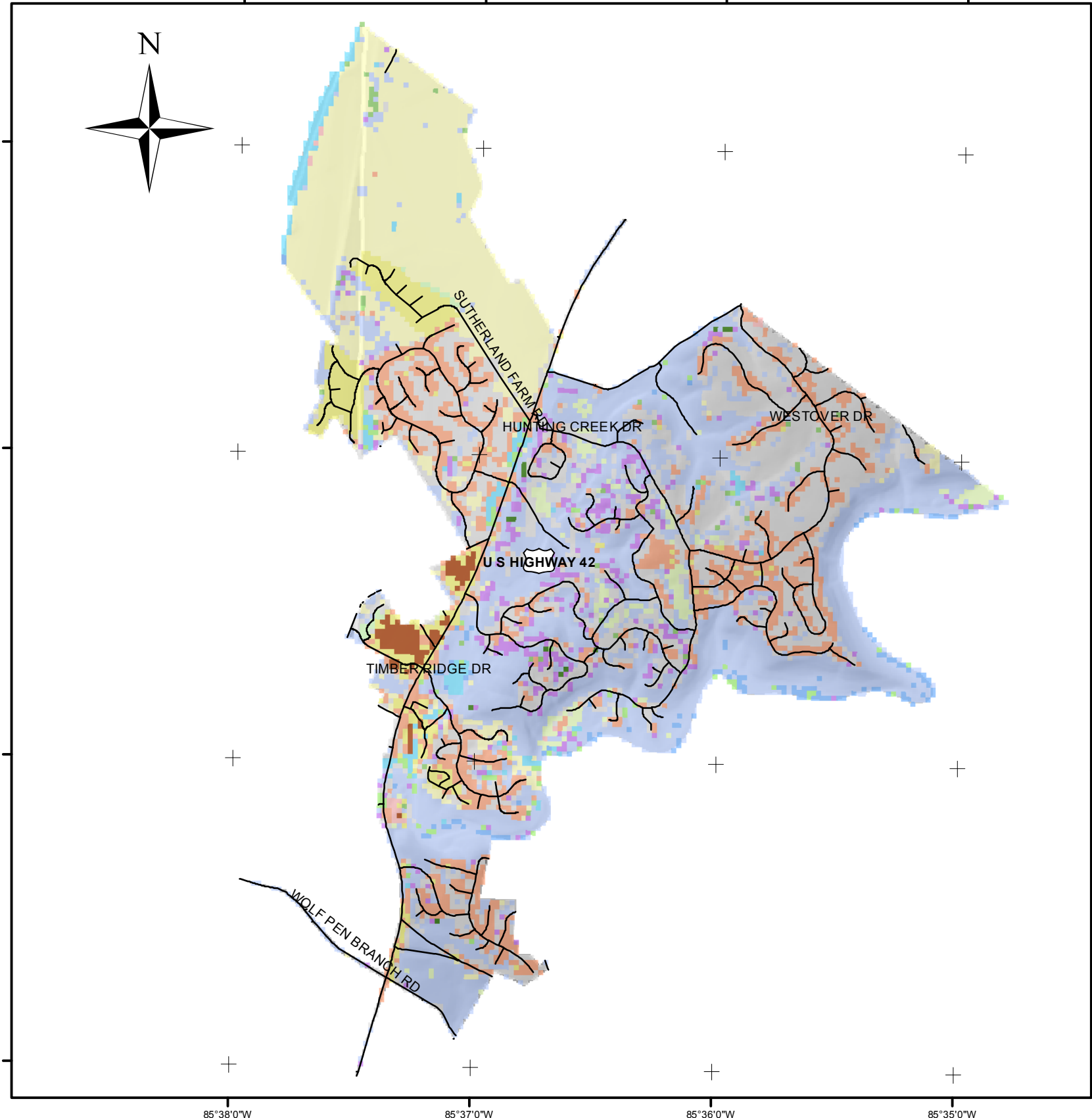
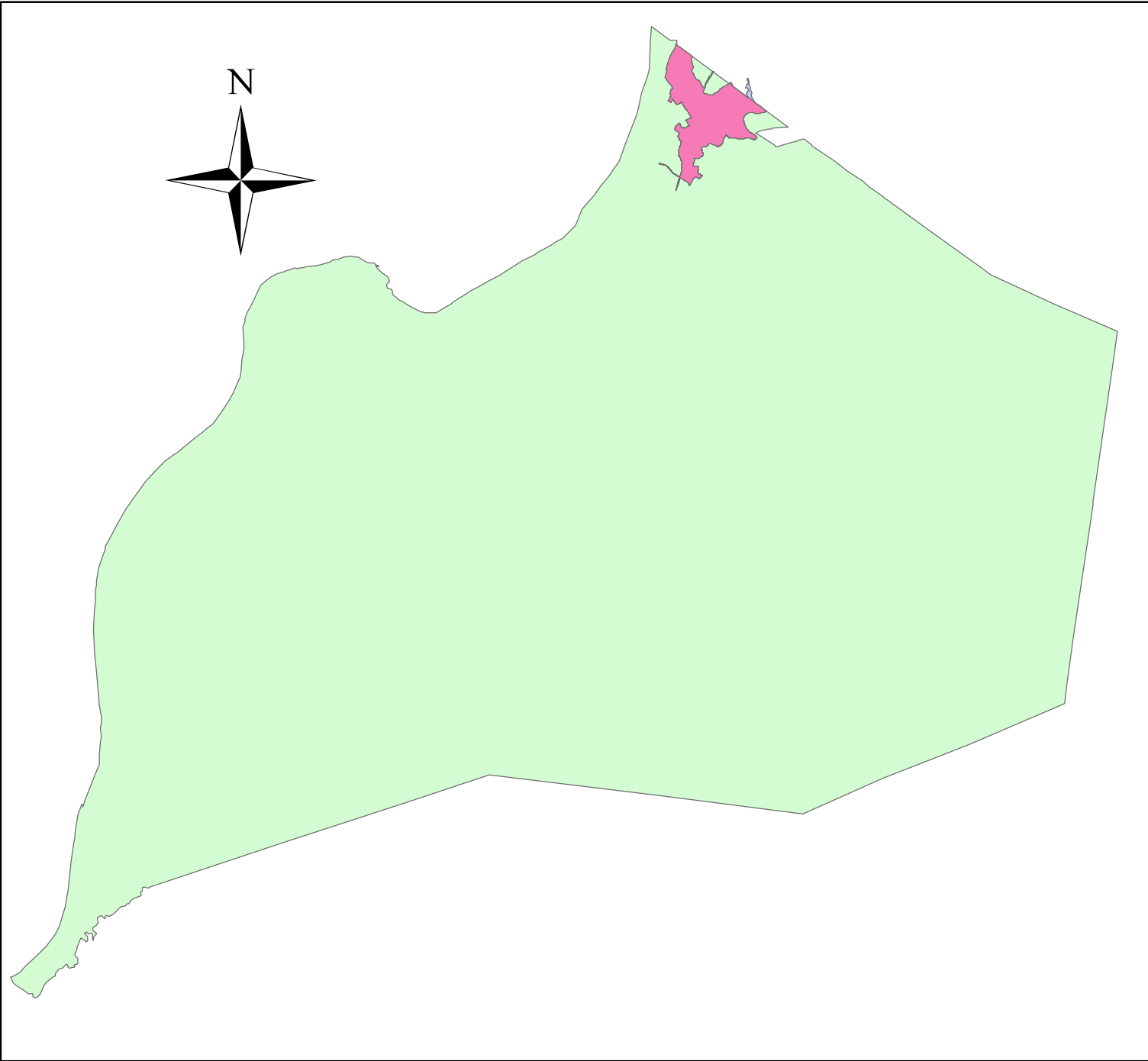
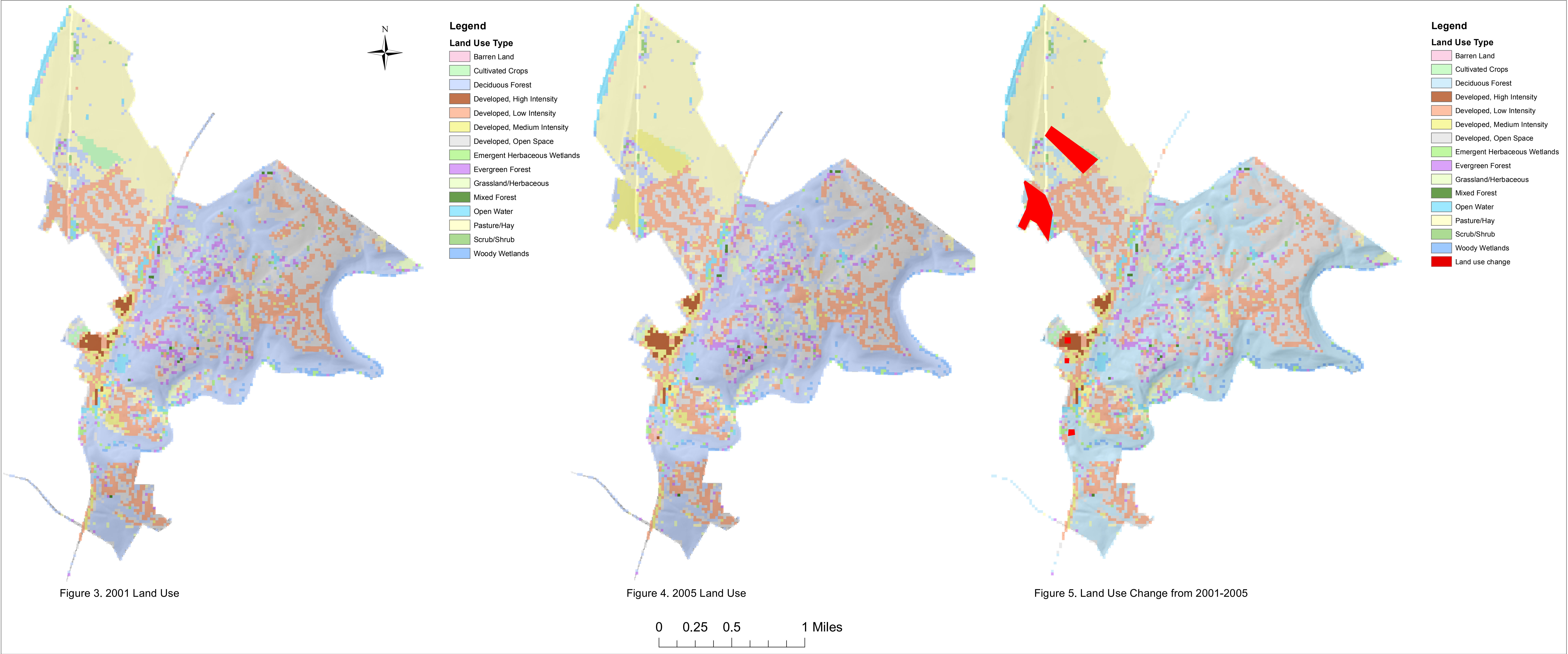


Table 1. Landuse by Percentage for 2001

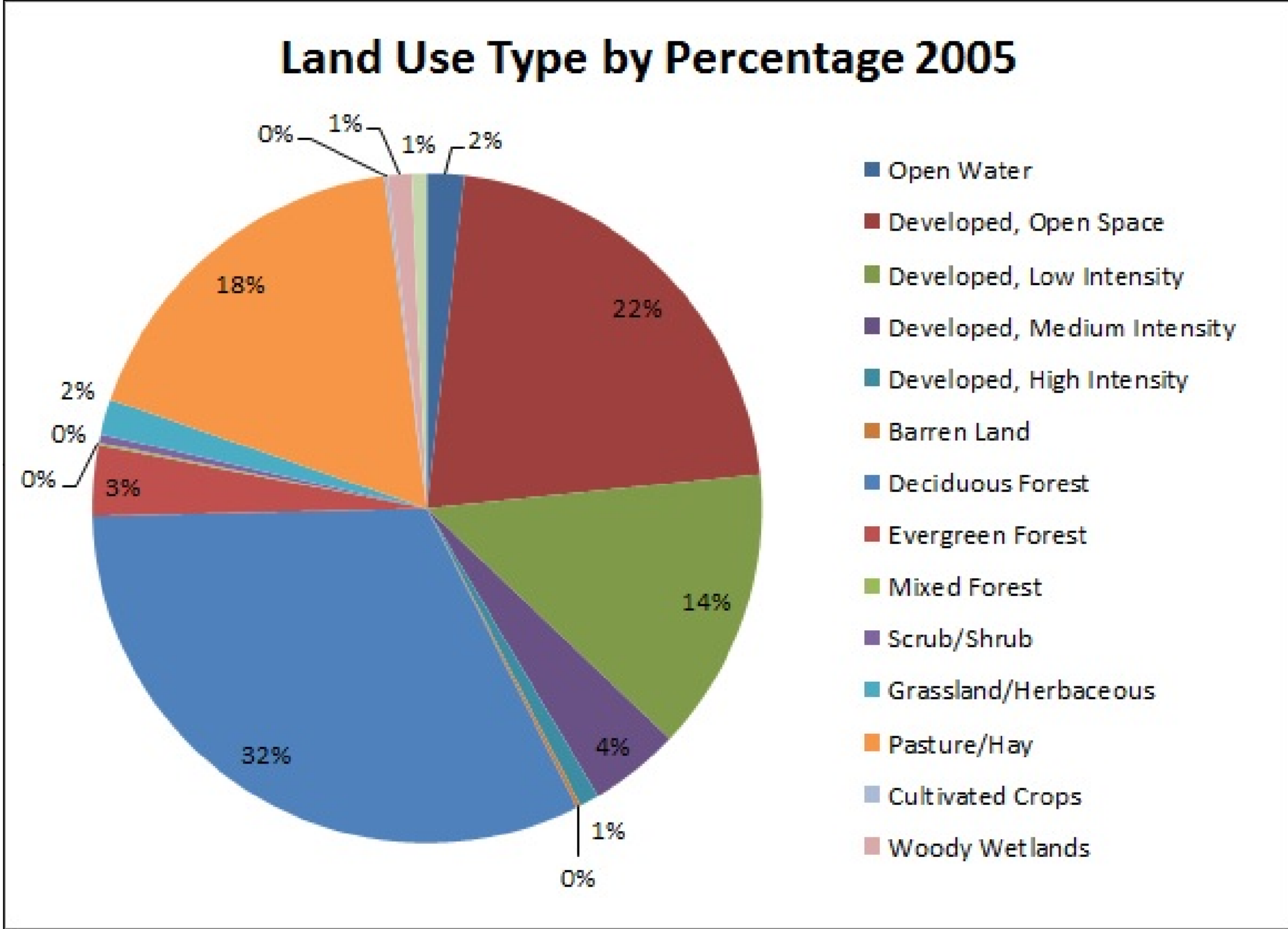


Table 2. Land Use by Percentage for 2005

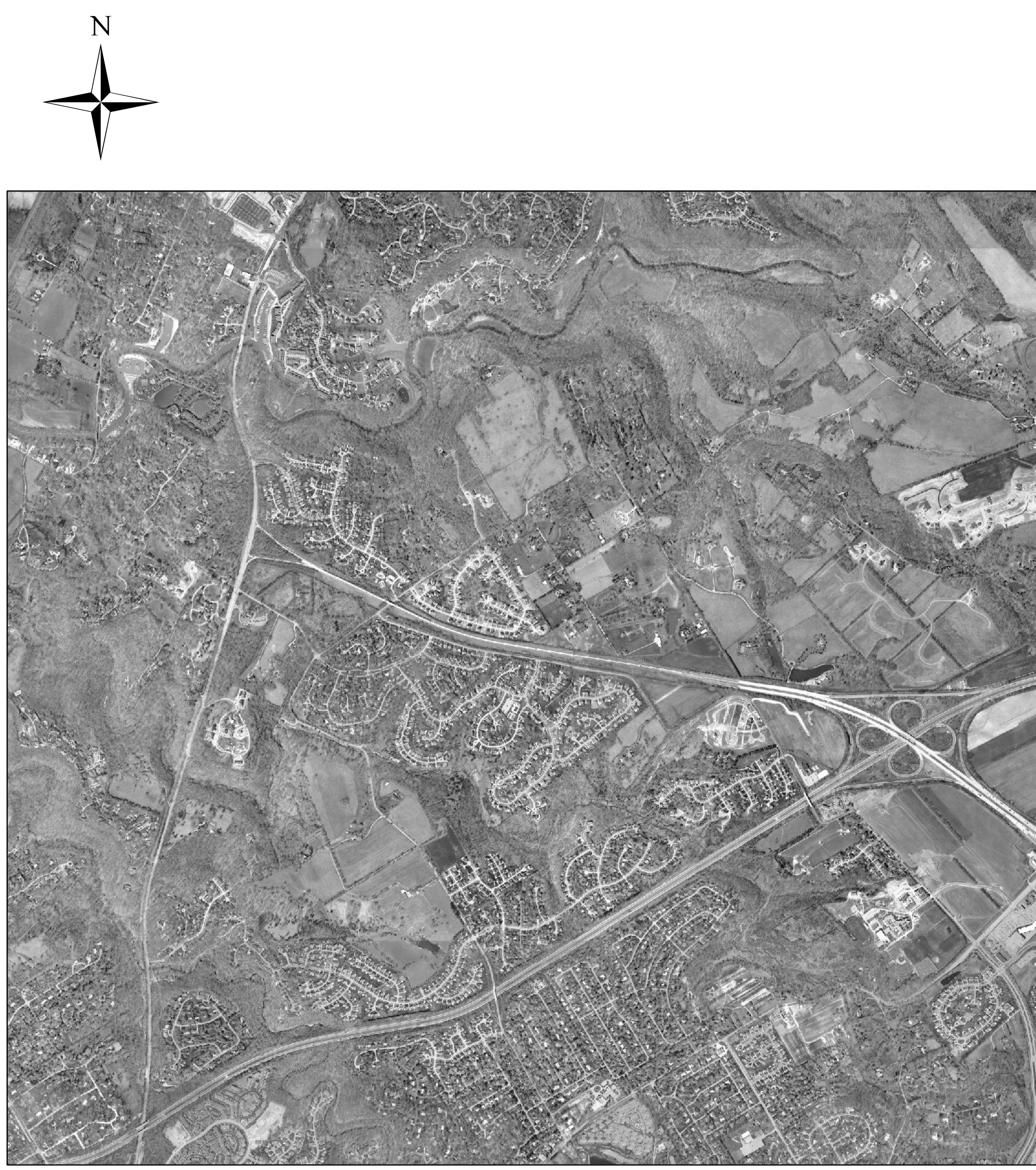


Figure 6. Aerial photography from 2001

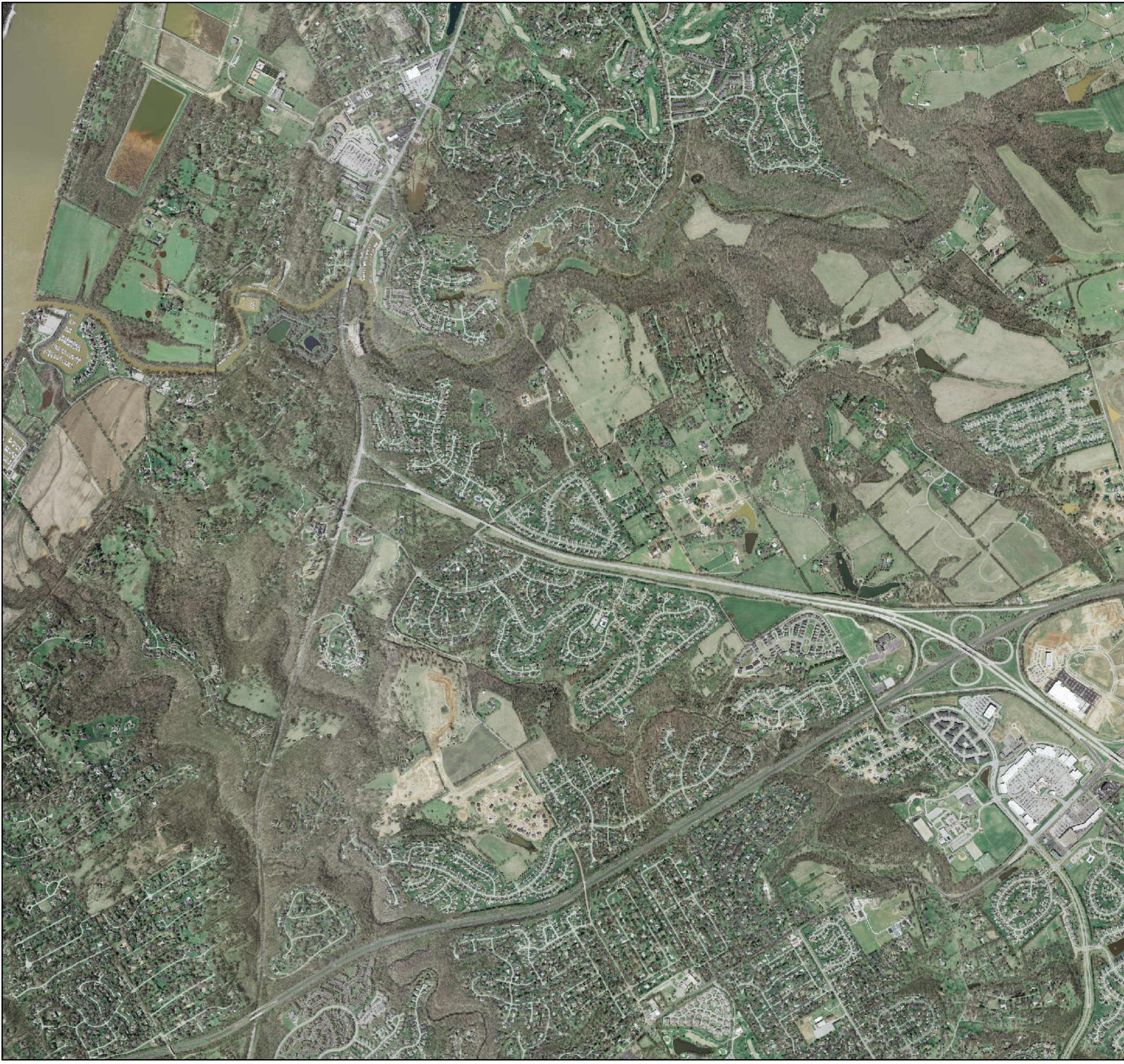



Figure 7. Aerial photography from 2005


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County Metropolitan Sewer District
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Louisville & Jefferson Country Information
Consortium (LOJIC), a Jefferson County,
Kentucky, base cooperative project of:
City of Louisville
Jefferson County
Metropolitan Sewer District
Property Valuation Administrator
Elevation data vertically exaggerated 1 time
Base data from: Kentucky Geoportal Netwrk



Cartography by: Nga Nguyen
December 7, 2013



Figure 2. Base Map of the portion of Prospect within Jefferson County