

San Diego GIS: A Case Study An Enterprise Approach

By

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The Context

- ◆ **A Multi-participant enterprise GIS project**
- ◆ **Covers large geographic area (4,200 square miles).**
- ◆ **A highly integrated system (28 Departments).**

What is “Enterprise GIS”

- ◆ **One GIS database for multiple participants**
- ◆ **Shared staff**
- ◆ **Shared costs**
- ◆ **Shared Standards**

Advantages of Enterprise GIS

- ◆ **Costs less**
- ◆ **Reduces/eliminates redundant mapping**
- ◆ **Improves services**
- ◆ **Provides better information for decision making**

Disadvantages of Enterprise GIS

- ◆ Takes longer
- ◆ Requires cooperation among departments/agencies
- ◆ Requires agreement on standards, cost allocation, data ownership . . .

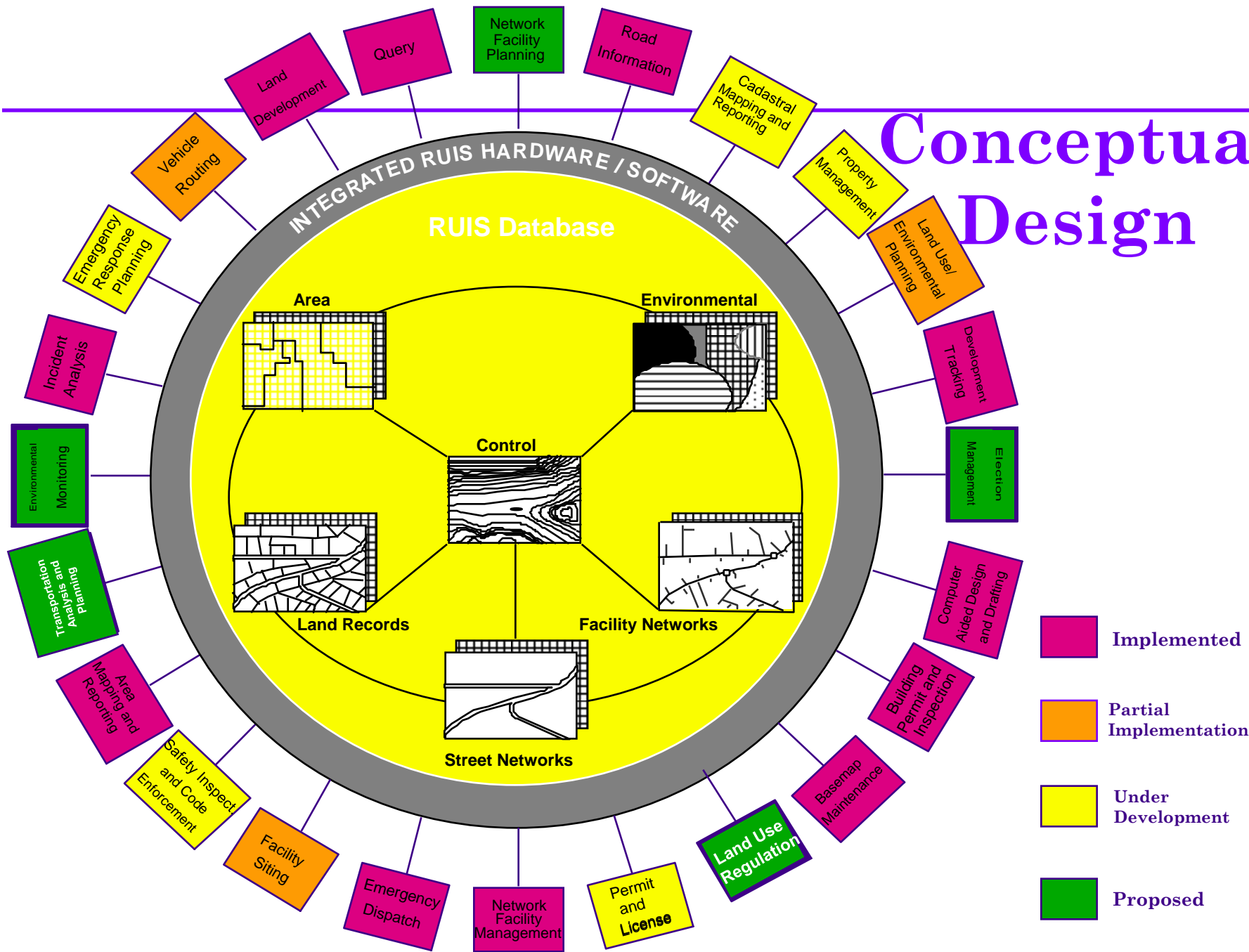
Goals and Objectives

- ◆ **Reduce or eliminate redundant activities**
- ◆ **Integrate and share information**
- ◆ **Improve decision making**

Steps in Implementation

- ◆ **Conceptual design**
- ◆ **Data development**
 - ◆ **Base map**
 - ◆ **Other layers**
- ◆ **Applications development**

Conceptual Design



Data Layers

- ◆ Roads
- ◆ Property boundaries
- ◆ Administrative boundaries
- ◆ Water, sewer and storm drains
- ◆ Vegetation
- ◆ Aerial photographs
- ◆ Topography (terrain models)

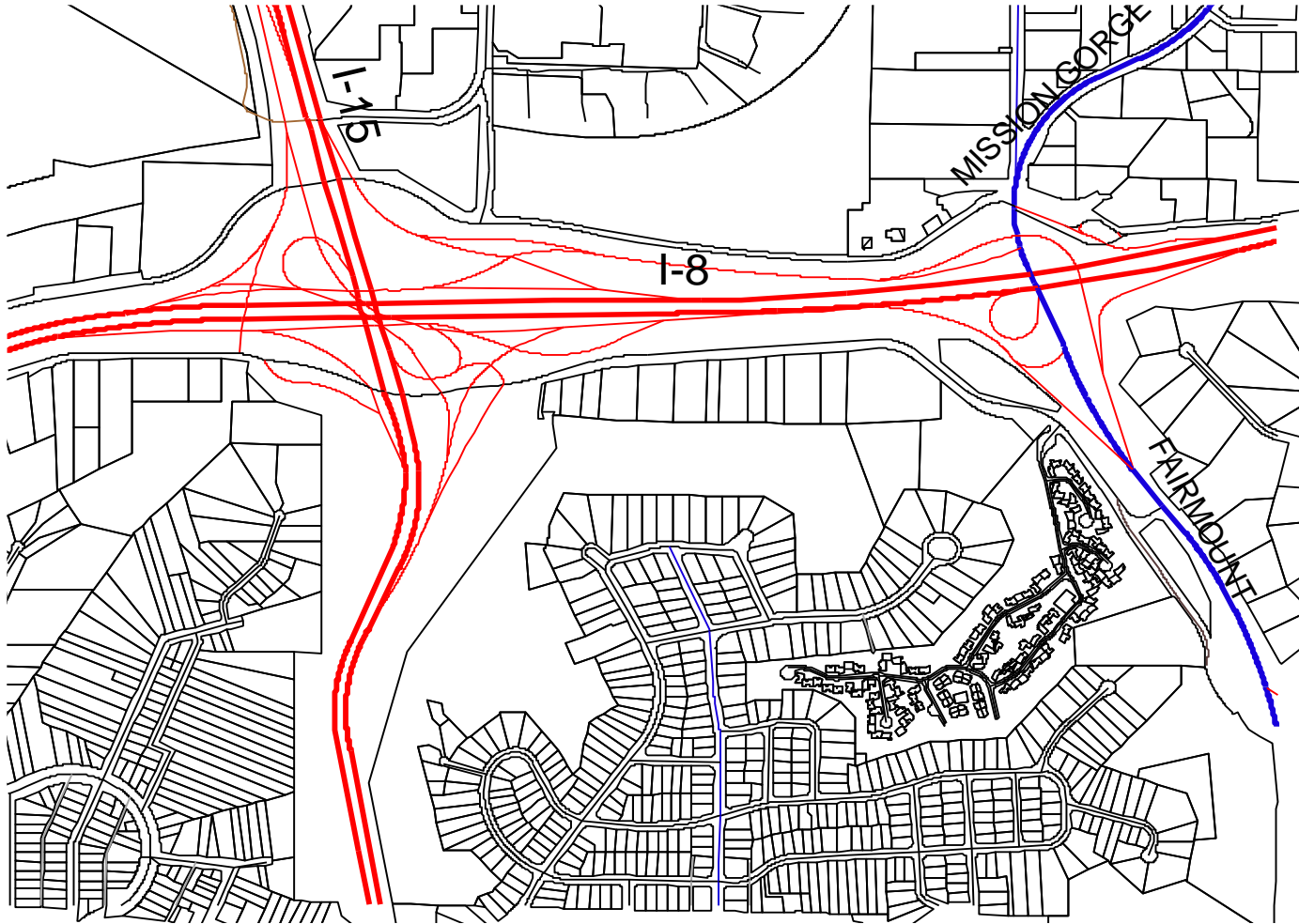
Staffing

System Operation and Maintenance

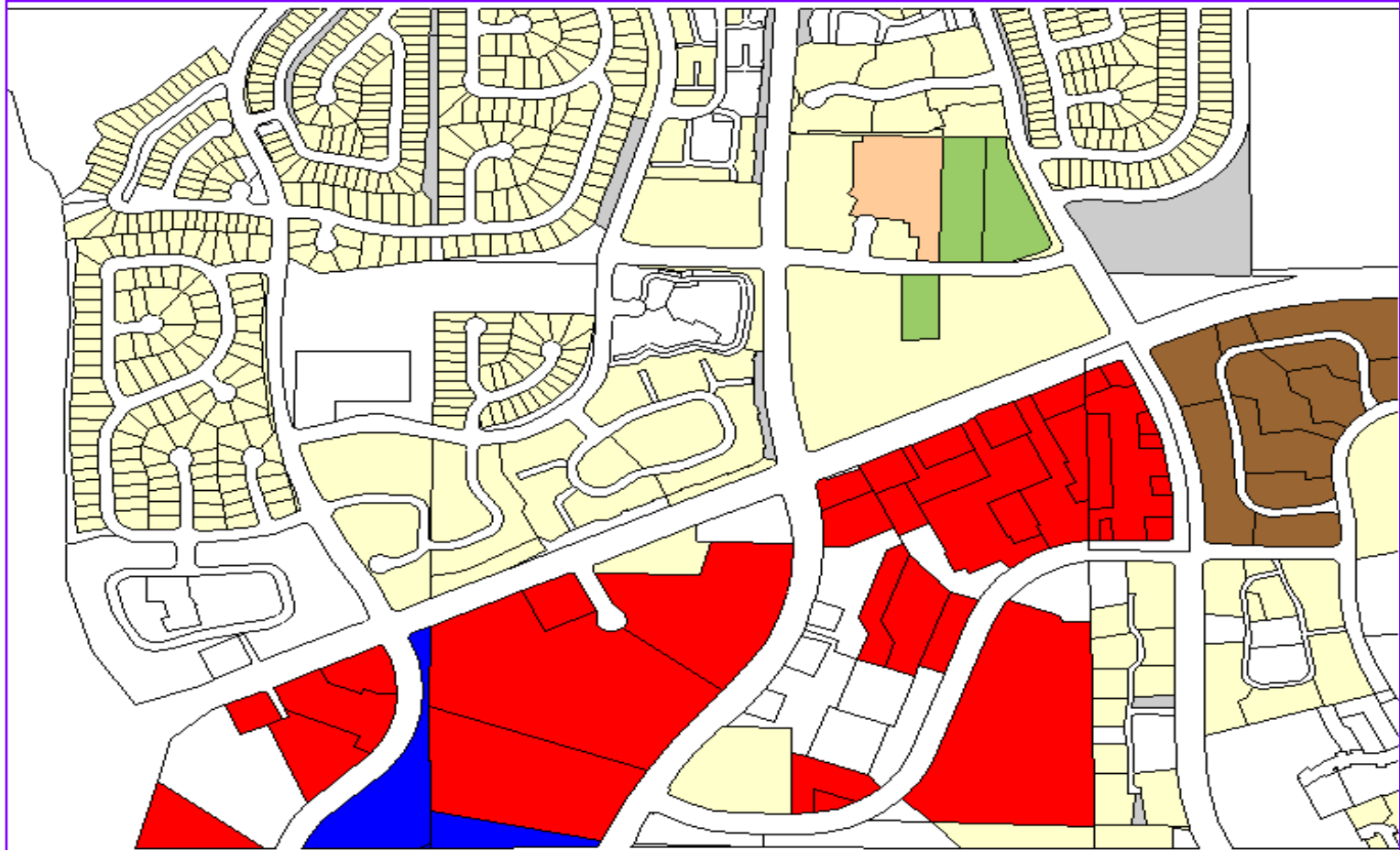
<u>Position</u>	<u>Number</u>
GIS Applications Manager	1
GIS Analysts/Programmers	20
System Administrators	5
Database Administrator	1
Data Conversion Technicians	22
Clerical/Financial	4
Total	53

Applications

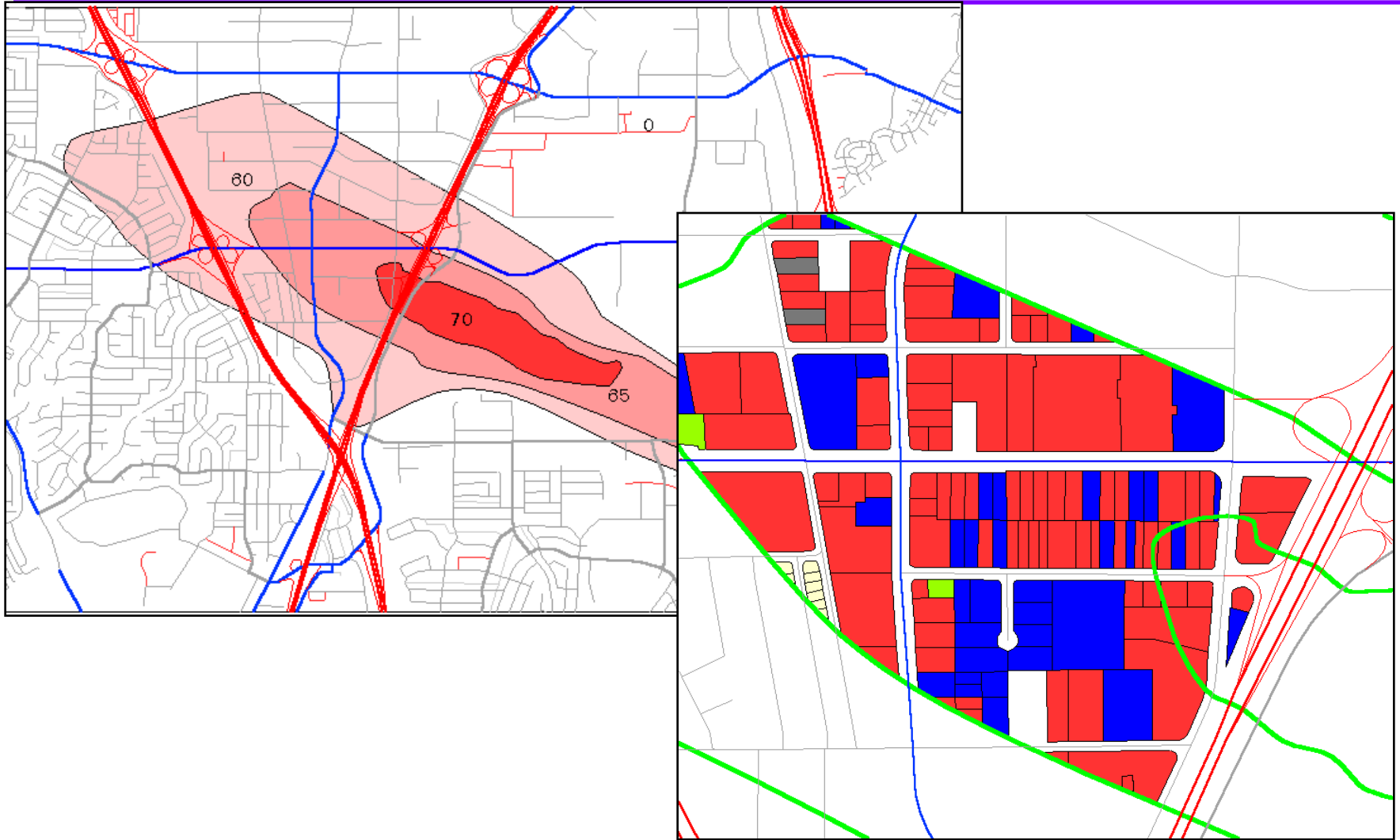
Base Mapping



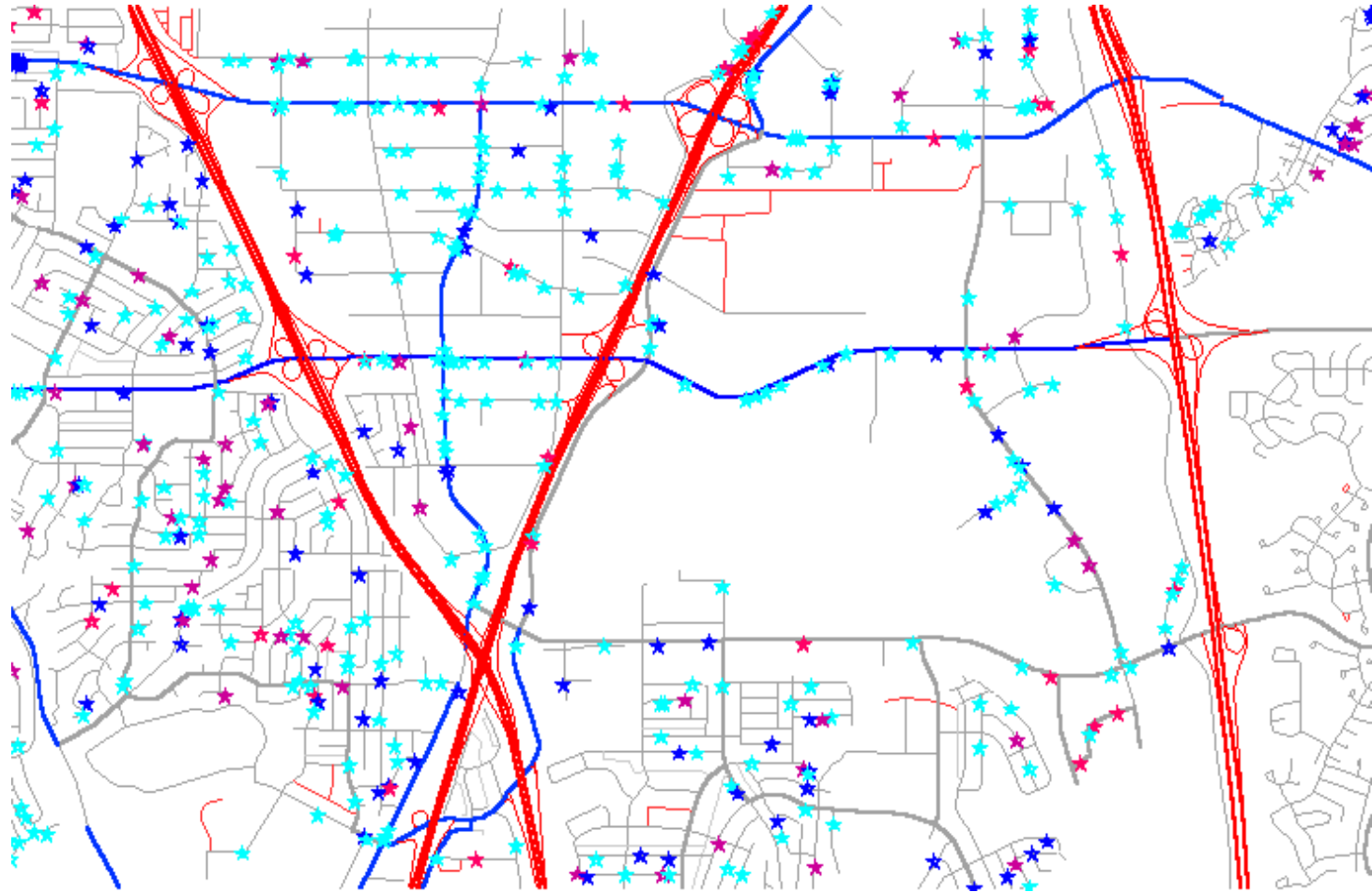
Zoning



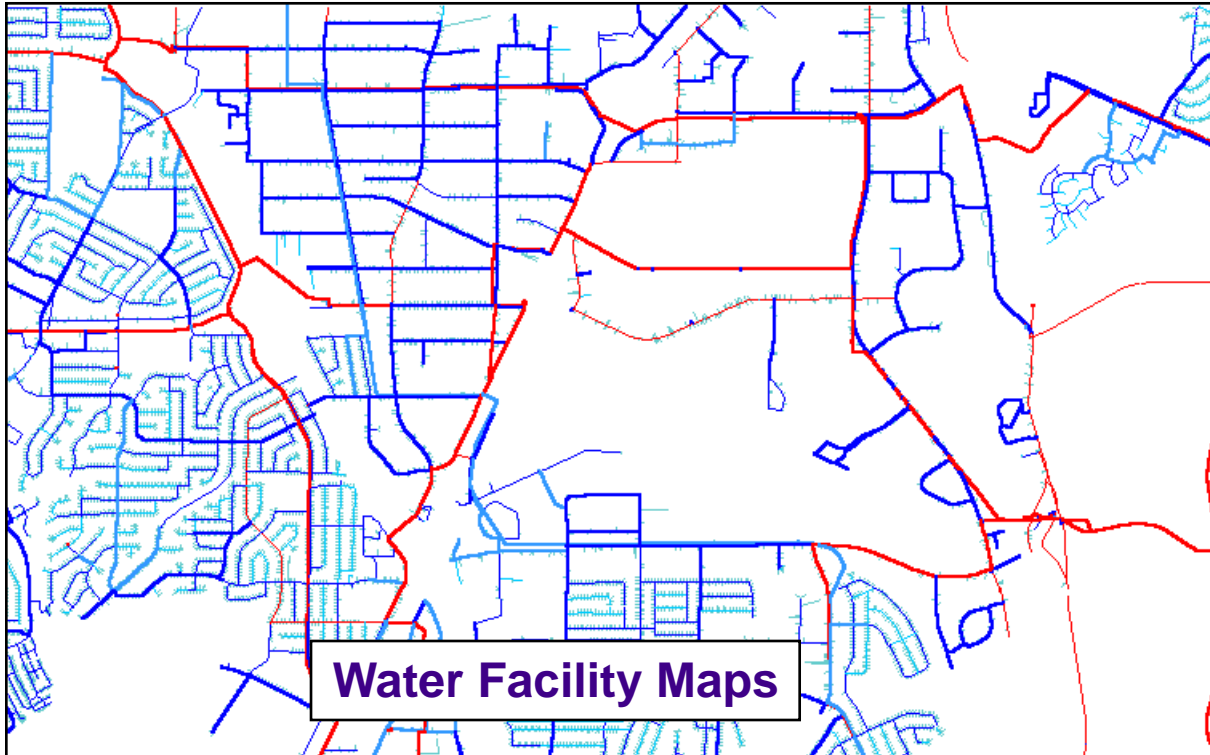
Airport Noise Analysis



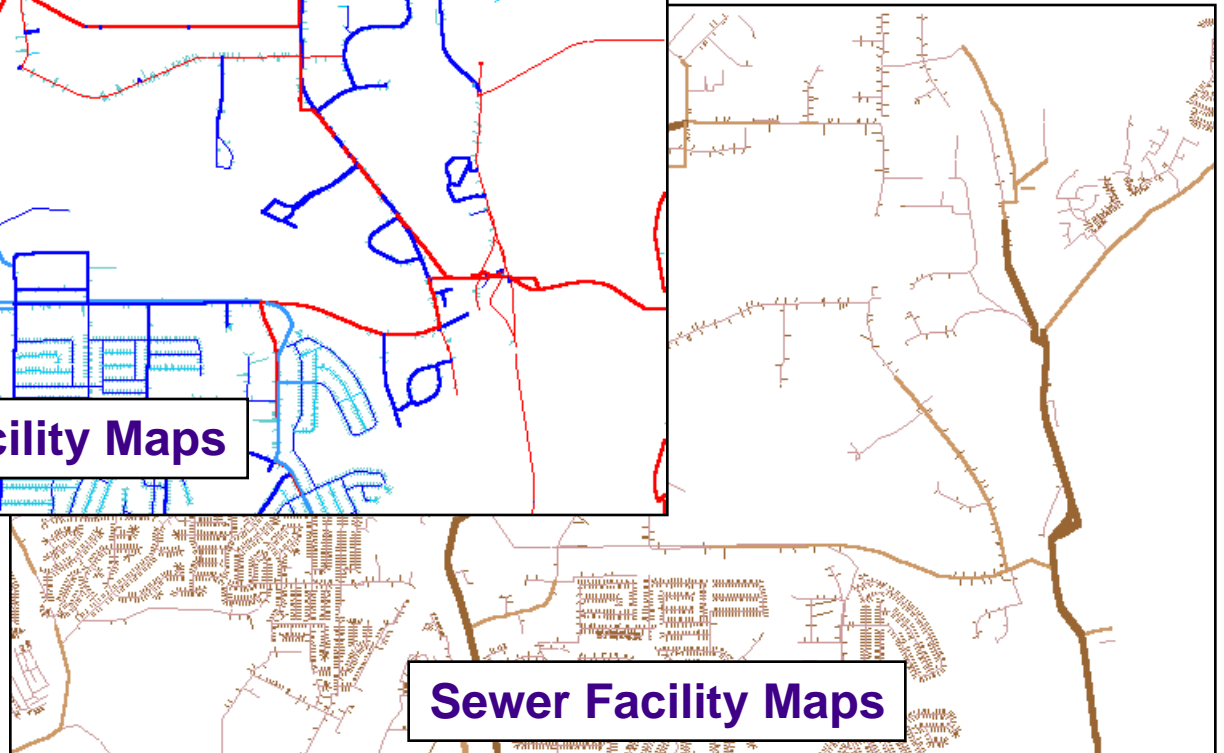
Building Permits



Facility Mapping



Water Facility Maps

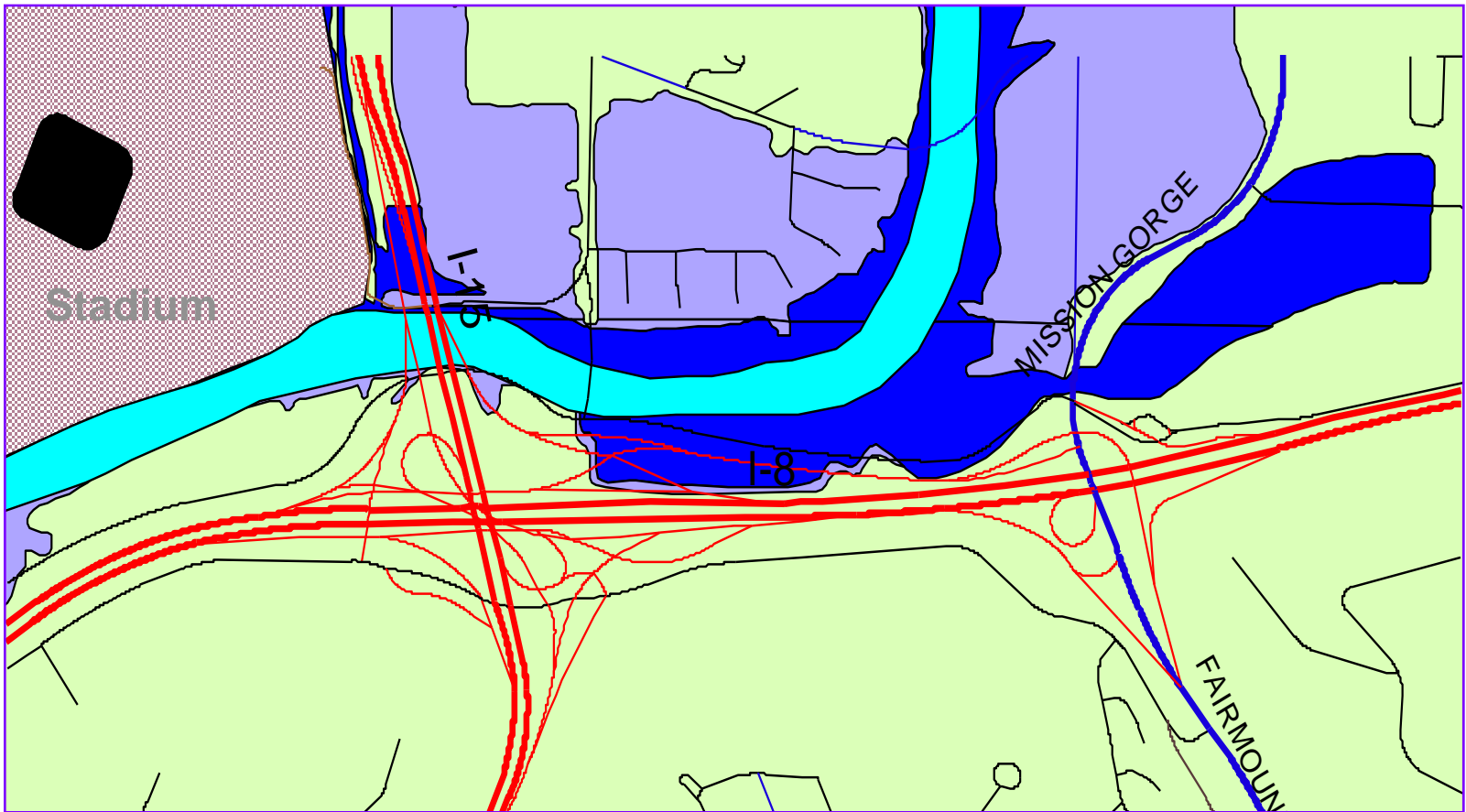


Sewer Facility Maps

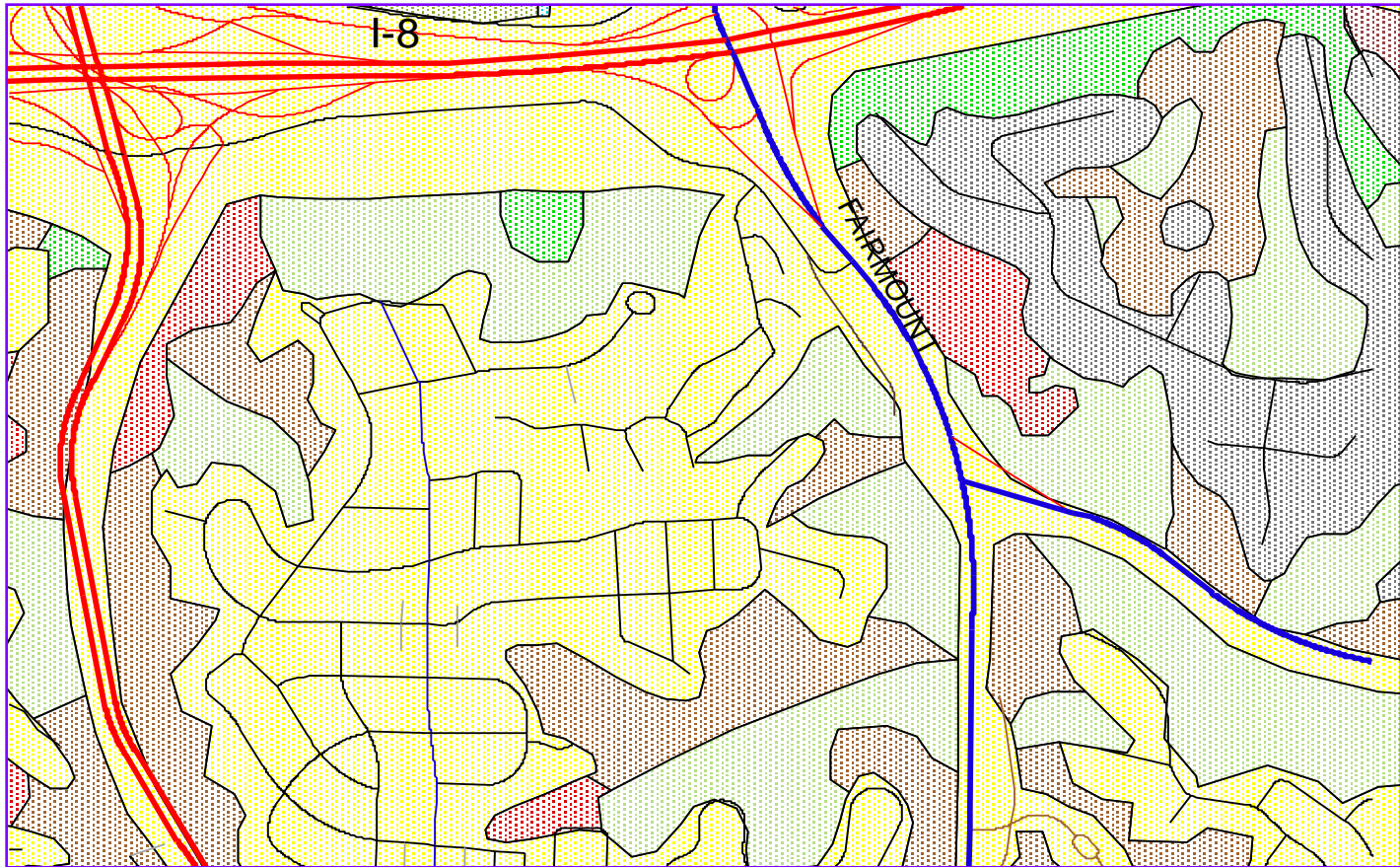
Pavement Management



Floodplains



Vegetation and Sensitive Habitats



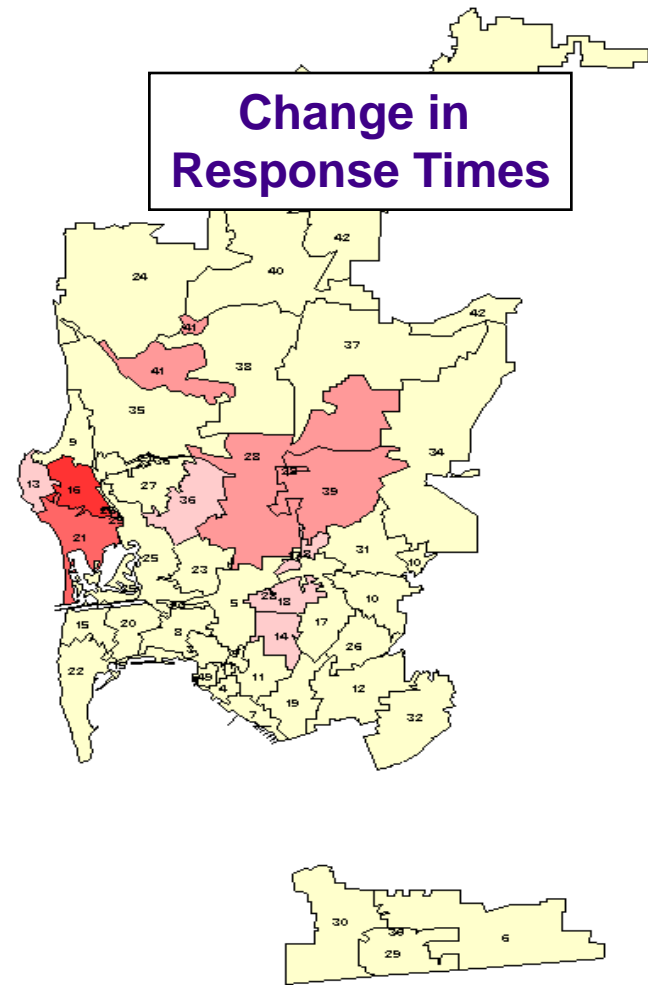
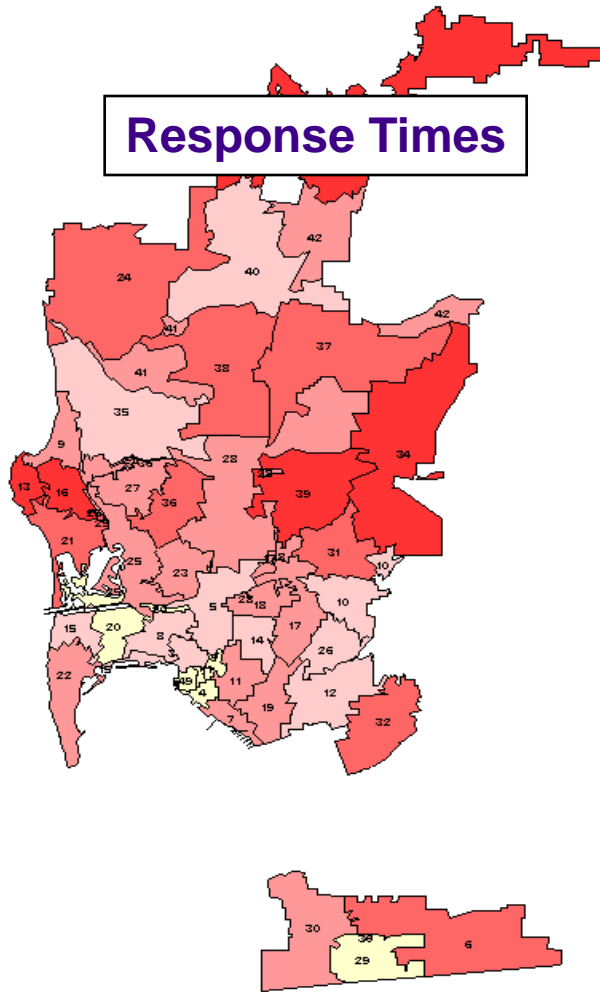
Computer Aided Dispatch



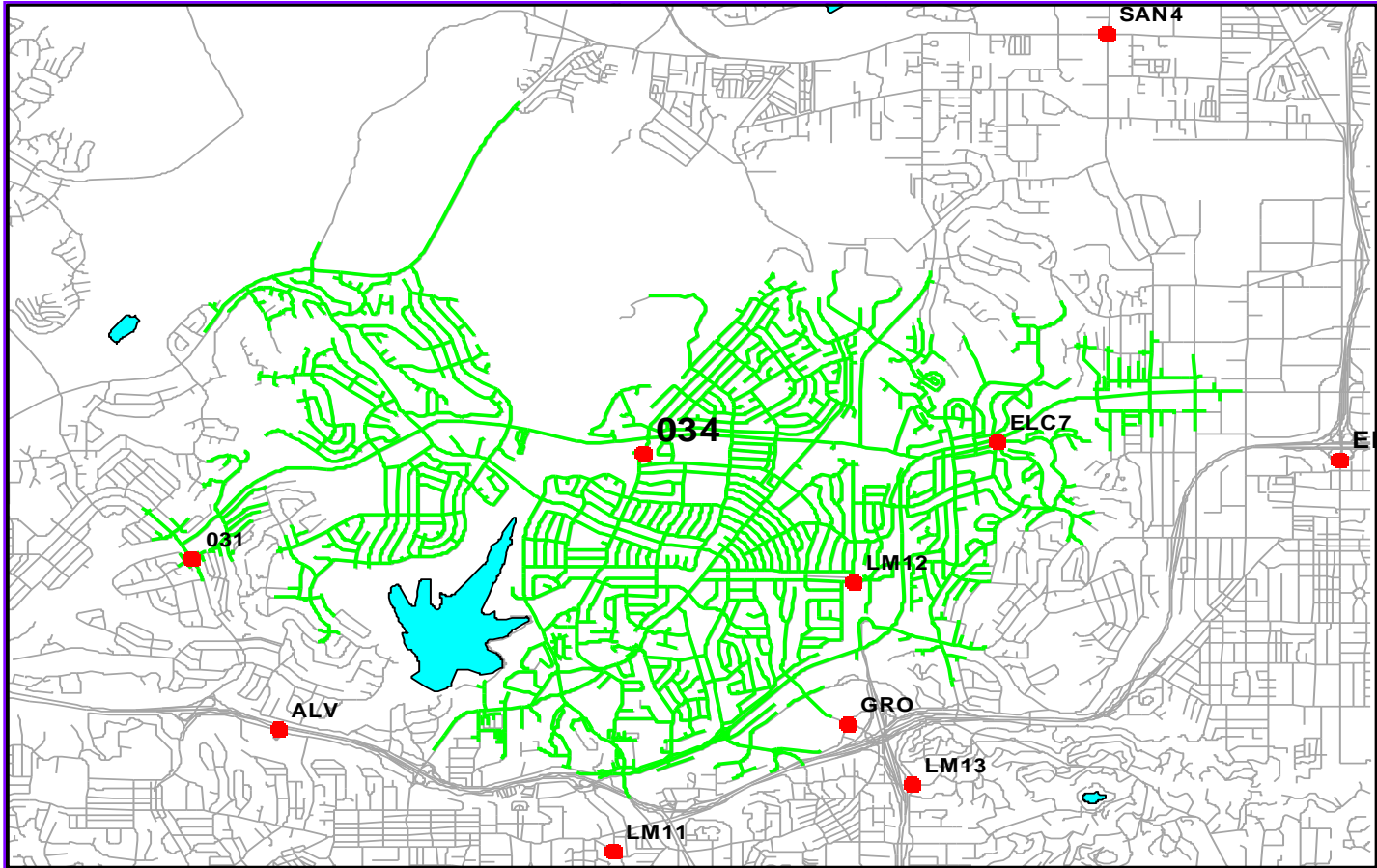
Crime Mapping and Analysis



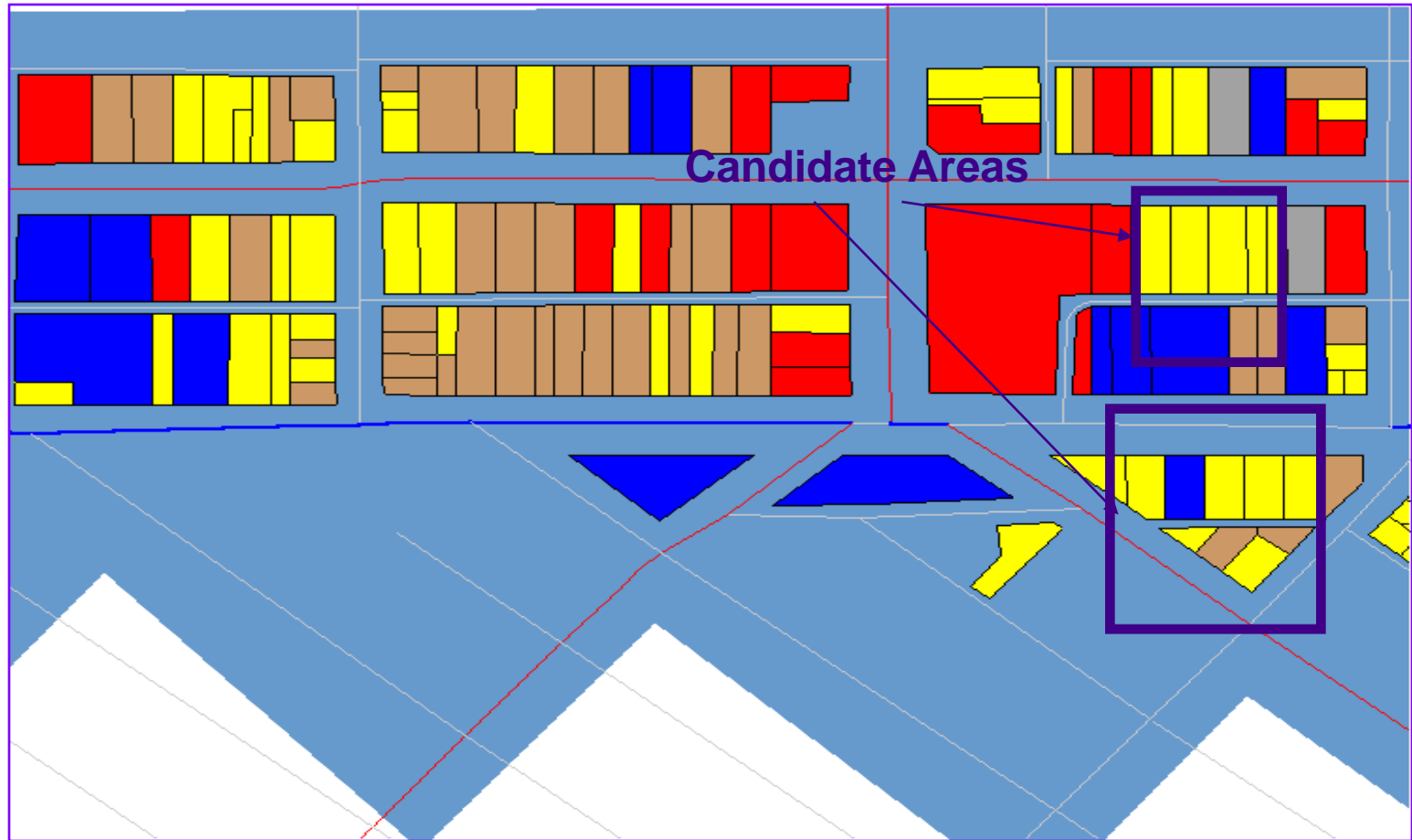
Analysis of Fire Station Closure



Siting New Fire Stations



Economic Development



Thanks for Listening