

TRAPSS

Xia, Yongxia
Geography 5419
Dr. S. Macey
April 28, 1998

Introduction--The Problem

- **Communities are interested in developing tourism**

They often don't know where to start

- **who to contact**
- **what resources are in their area**
- **who to link with to create a critical mass of attractions**

The Challenge

- **information is often hard to find**
 - **takes time to track down contacts**
 - **information is not readily available**
 - **information not always in usable form**

Project Goal

- **Create an information system that will make tourism planning information easily accessible**

Description

- **To develop a way to bring together information about an area for the purpose of tourism planning**
- **Information is required from many sources and types of information can vary greatly**
- **A relational database is necessary to store and manipulate this information and a GIS makes the information graphic, and allows for spatial analysis**

System Design

- **Relational database manages non-spatial information, and ensures data integrity, consistency, and minimizes redundancy**
- **GIS system provides mapping capability and spatial analysis**



System Design

- **Information needs of the database**
 - National parks, state parks, and historical sites
 - Chambers of commerce, Convention of Visitor's Bureaus, environmental organizations, and important contacts
 - Related businesses
 - Cities
 - Counties
 - Texas Travel Trails
 - Tourism Regions
 - Council of Governments

Database Structure

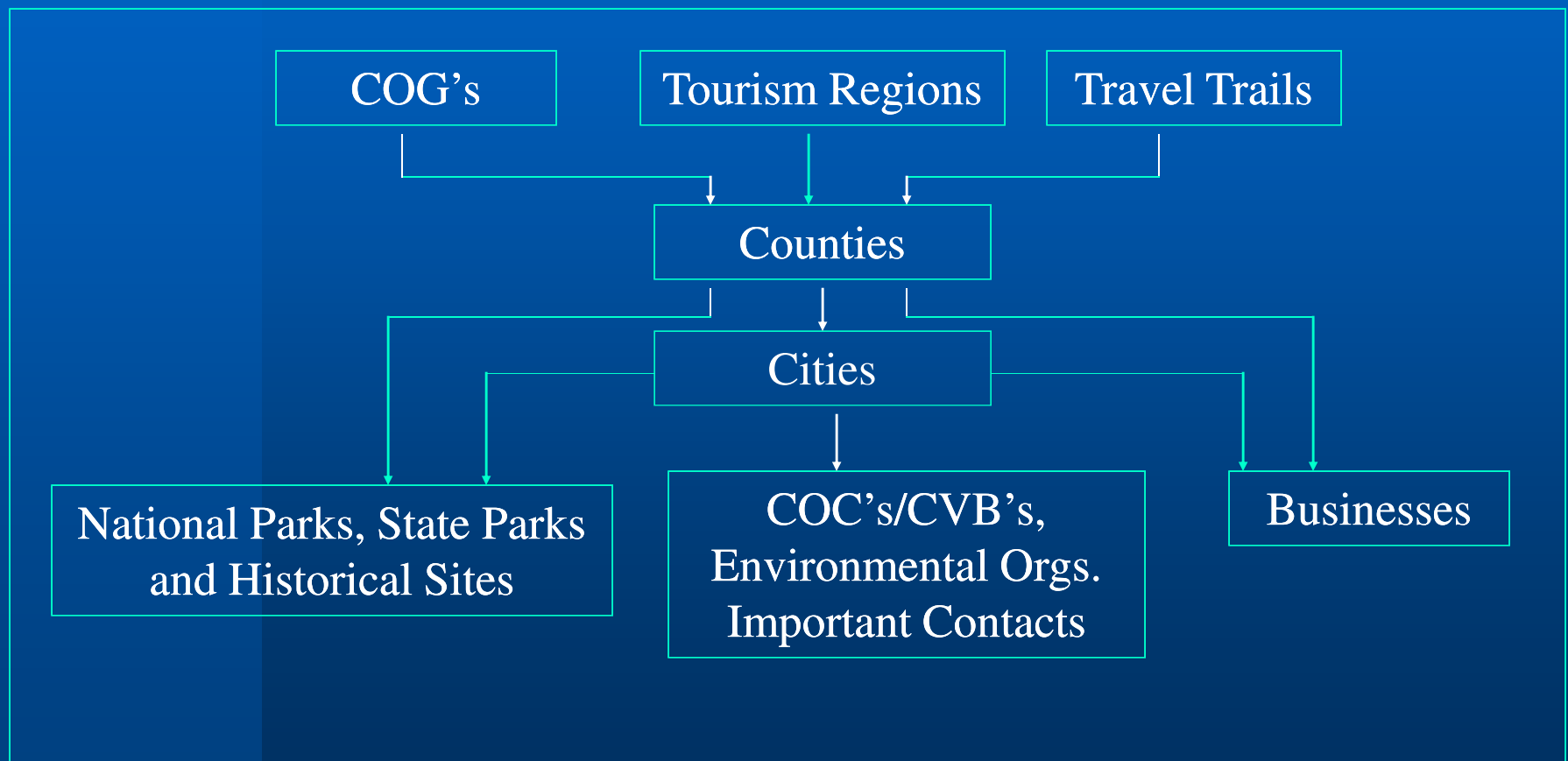
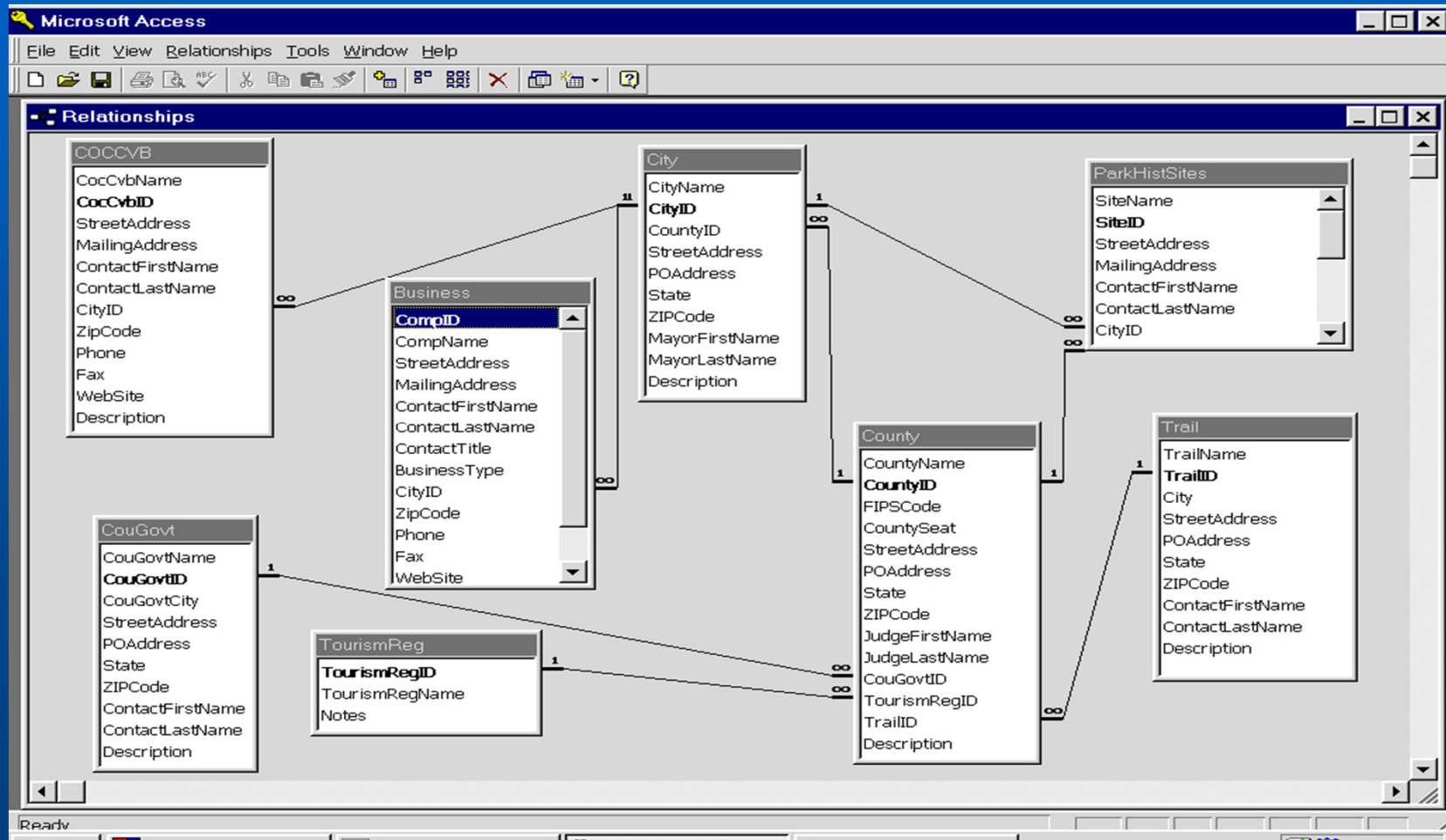


Table Relationship Diagram



Functionality of the RDBMS

- **Data Entry**
- **Data Query**
 - Query individual record**
 - Query by city, county, or region**
- **Link to Arcview spatial data**

NHTIS GIS System: Datasets

- **Collected and Projected Datasets**
 - **National parks (TPWD)**
 - **State parks (TPWD)**
 - **Historical sites (THC)**
 - **Wildlife management areas (TPWD)**
 - **National wildlife refugees (TPWD)**

NHTIS GIS System: Datasets

- **Collected and Projected Datasets**
 - **Reservoirs (TNRIS)**
 - **Highways (USDOT & TNRIS)**
 - **Texas natural regions (TNRIS)**
 - **County polygons (TNRIS)**
 - **City polygons (TNRIS)**

NHTIS GIS System: Datasets

- **Secondary Datasets**

- **Derived from original data**

- **Texas Travel Trails (10 total)**

- Forts Trail** (Texas Historical Commission to publish new map)

- Independence Trail** (CNHT)

- Mountain Trail** (CNHT)

- **Councils of Governments**

NHTIS GUI Design Specifics Cont.

- **Dynamic link to Access database through Access SQL server**
- **Link to other applications:**
 - **Internet Explorer/Netscape**
 - **Wordpad/Notepad**

NHTIS: Application

- **Focusing on mountain trail to test functionality of the system**
 - test dynamic link to database
 - start testing spatial analysis with NHTIS datasets

NHTIS: Mountain Trail

- **input datasets and overlay**
- **identify trail from highway dataset**
- **start to test different spatial tools of Arcview**

NHTIS: Spatial Analysis

- **Mountain Trail**

- Relationships between designated trail to parks and trail to historical sites, and parks to historical sites
- Trying to determine whether there is a spatial relationship between the road system and tourism features
- Planning to use it to locate new tourism attractions