Competence

Health Benefits

#### Quality

Diversity

#### Care

# **Cognitive Mapping & GIS**

Colorado Institute of Public Policy Dr. Lyn Kathlene and David Wallick



# **Systems of Care**

- Paradigm shift in social service delivery.
- Social worker is replaced with group of service providers, family & community members.
  - Develop collectively comprehensive plan
- Services are
  - Coordinated
  - Community-based
  - Culturally competent
  - Individualized



## **Community Resources**

- Formal and informal services important to SOC
- Informal least well-known
  - No official directory
  - At community level
  - Examples: church soup kitchens, transportation services for the elderly provided by non-profits or churches, in-home daycare providers not registered with the county.

# **Resource Identification Mapping**

Can identify overlap and gaps in service provision toward a System of Care Participants identify resources in their community Categories of mappers:

- Providers (social service, non-profit, faith-based)
- Clients (TANF, youths, foster care providers, adoptive parents)
- Ethnic/racial enclaves (Latino, Russian, Native American, African American)



### **Mapping Procedure in This Study**

- Participants indicate boundaries of area they know best
- Visualization exercise
- Draw in roads and other details by section of map
- Label resources of different types
- Identify resources they use and resources that others use
- Indicate strengths and weaknesses

DE Sita: Corrison / Swell = Service Community E Haven's Hope, Inc 057 1475 30. Garrison 1495 30. Garrison LAXWOOD 2000 Nancy Shindan Aprs. De Janes Burcley LES BANCHOT a fair American meris Dilage Aberer middle Scient (Four Hills Res. Pap Old Hipping Road Chines -65 Kipling Union Ave Residentia L 2-470

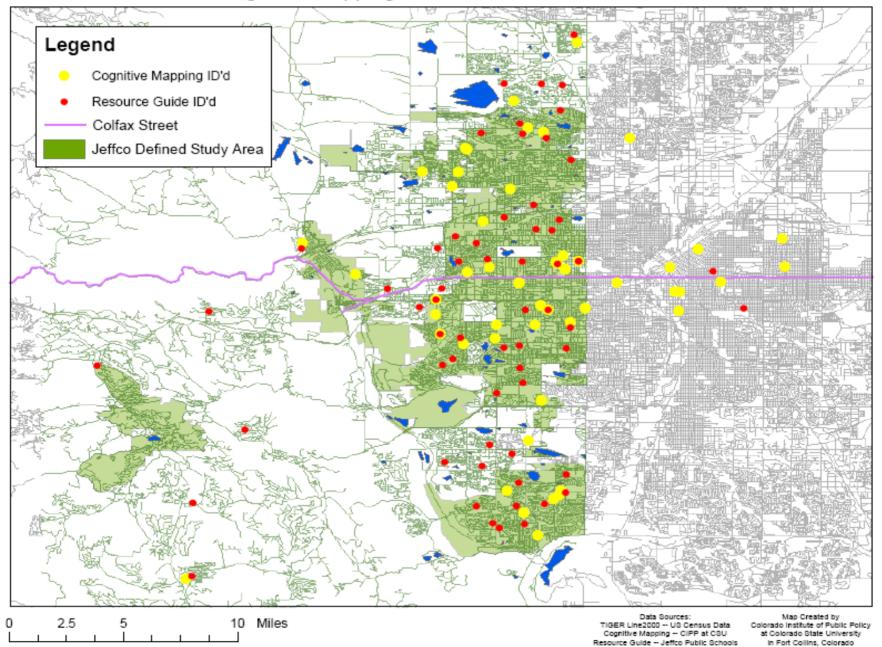
0



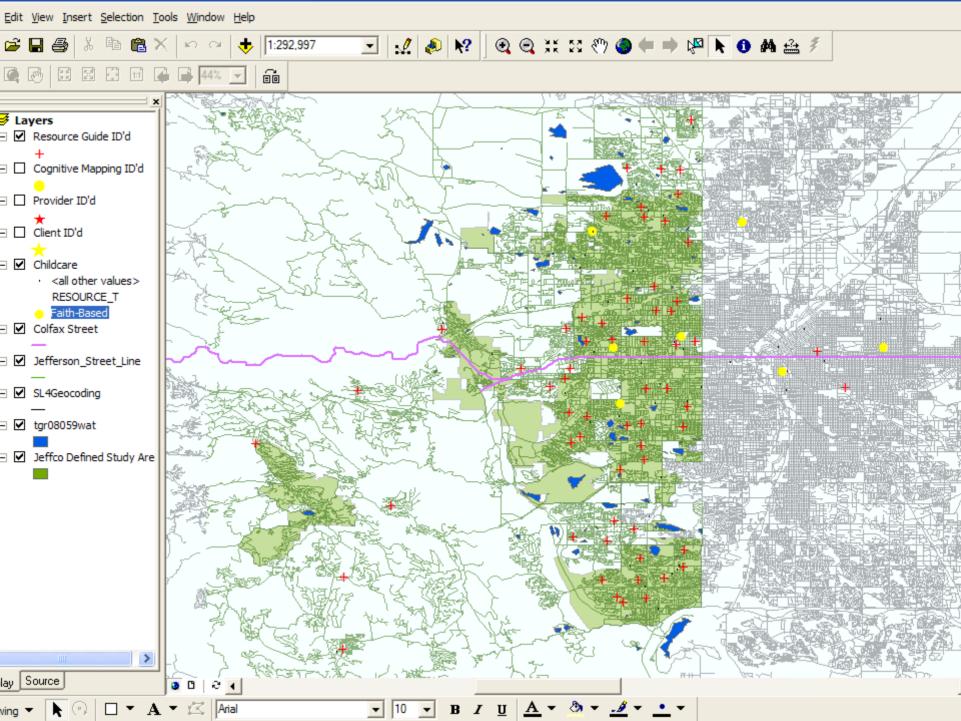
# **Mapping Data and GIS**

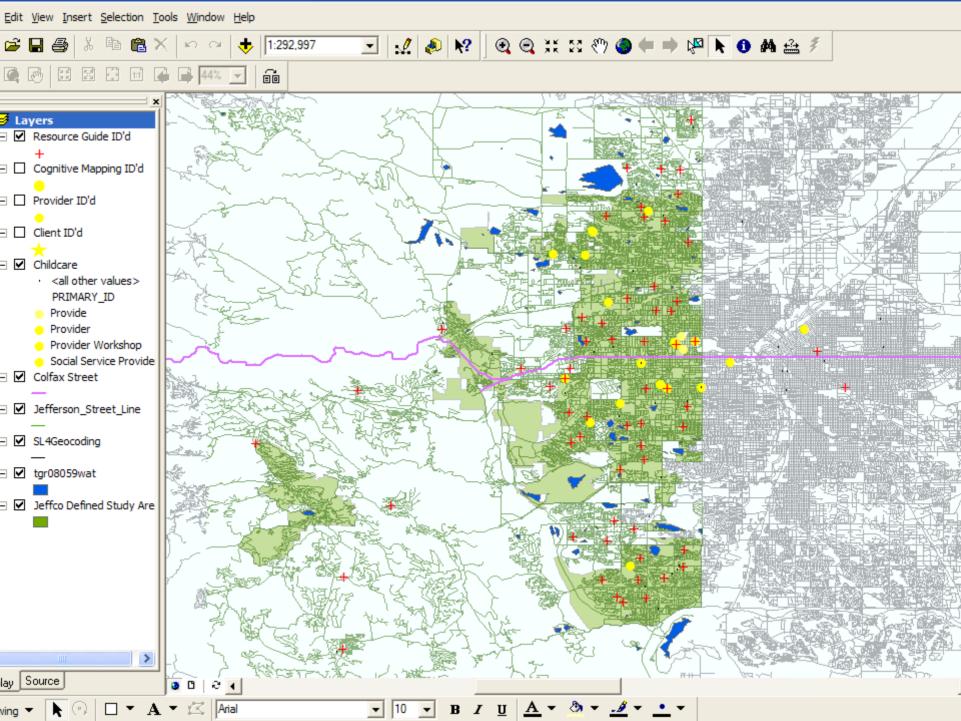
- Coded using Mapquest and phone books to identify exact addresses of datapoints
- Mapping data points entered into GIS into one or more of the 24 various resource layers (i.e., childcare, education, safety/legal, transportation)
- Allows to see proximity of services to clients and to each other
- Can determine overlap and gaps overall and in specific areas or for specific populations

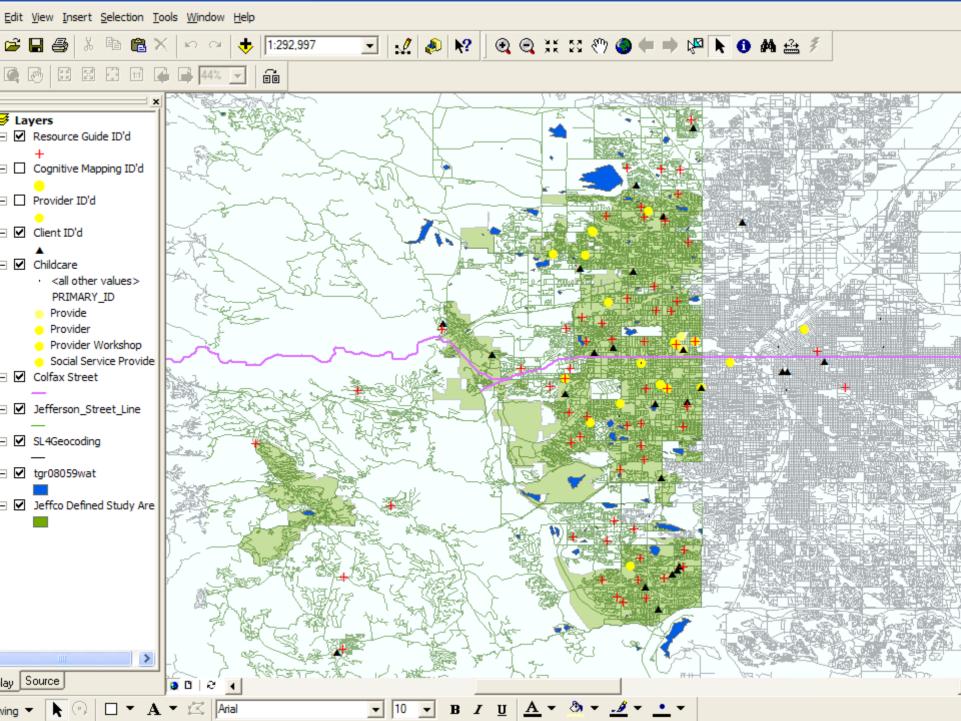
#### Childcare Resources: Cognitive Mapping ID'd vs Resource Guide ID'd

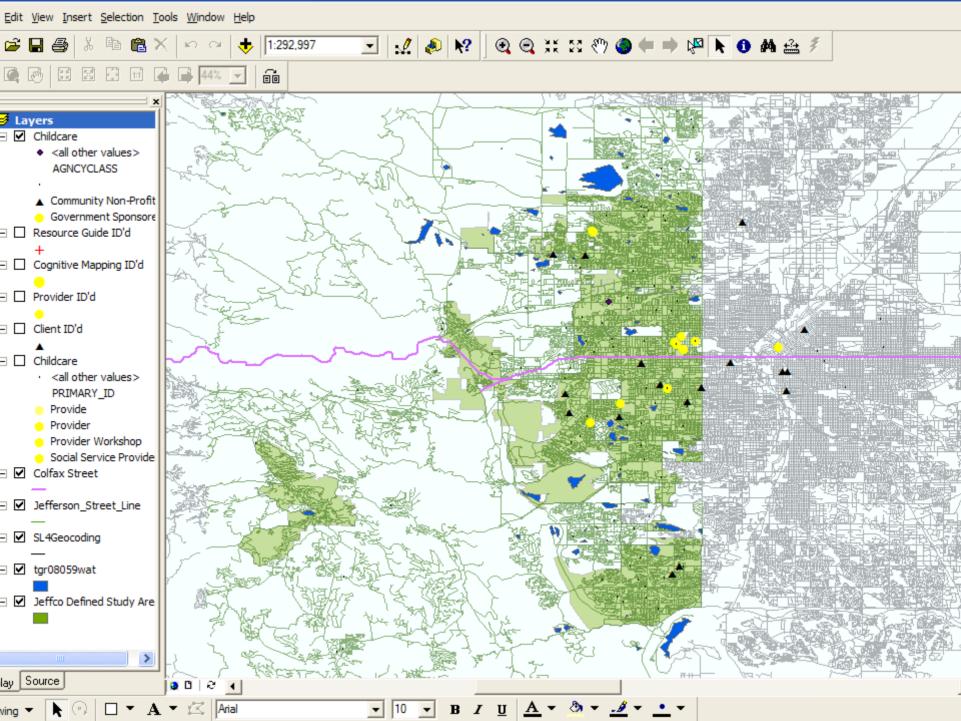


Ν

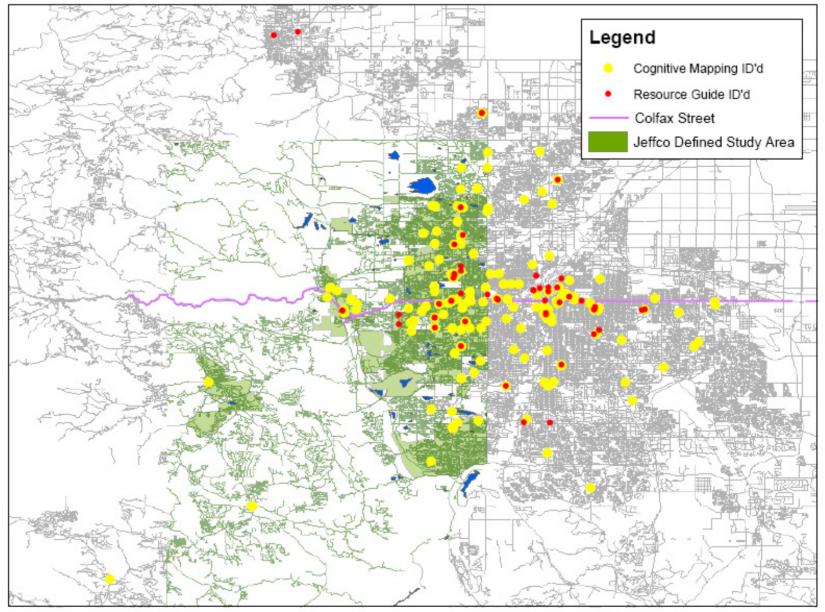






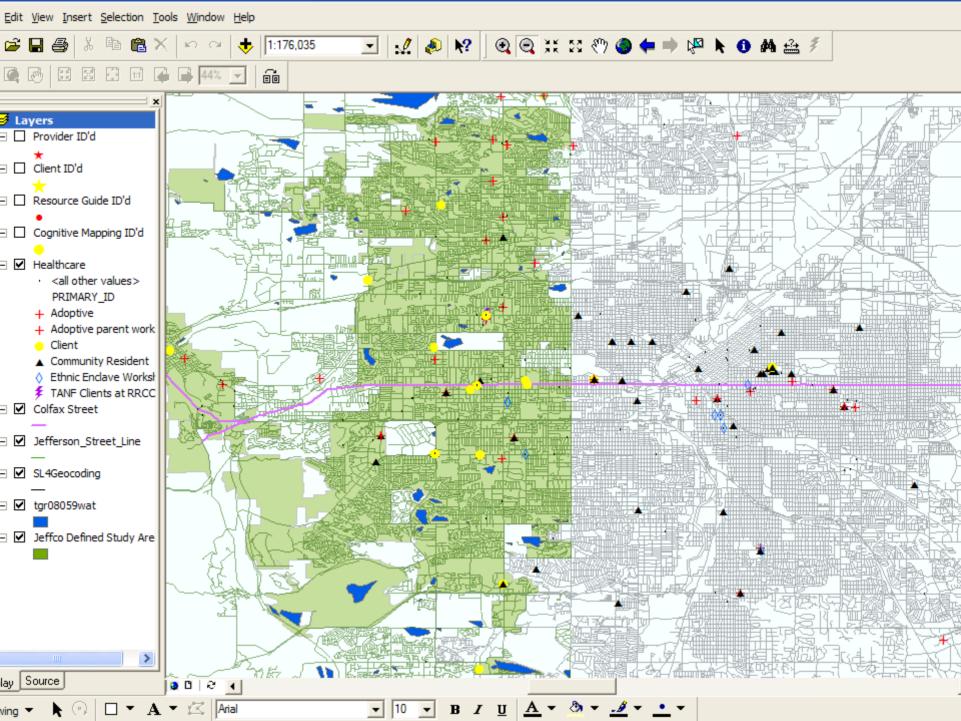


#### Healthcare Resources: Cognitive Mapping ID'd vs Resource Guide ID'd

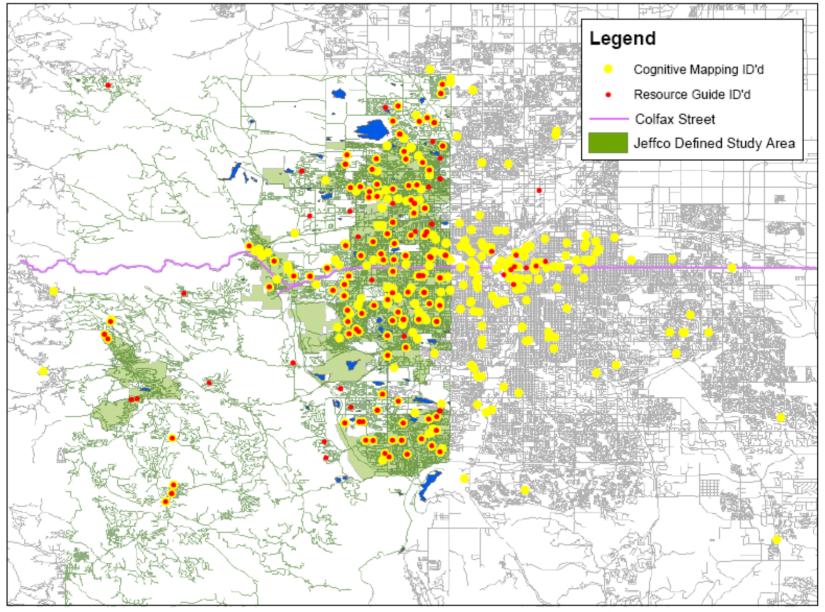


0 2.5 5 10 Miles

Data Sources: TIGER Line2000 -- US Census Data Cognitive Mapping -- CIPP at CSU Resource Guide -- Jeffco Public Schools Map Created by Colorado Institute of Public Policy at Colorado State University In Fort Collins, Colorado



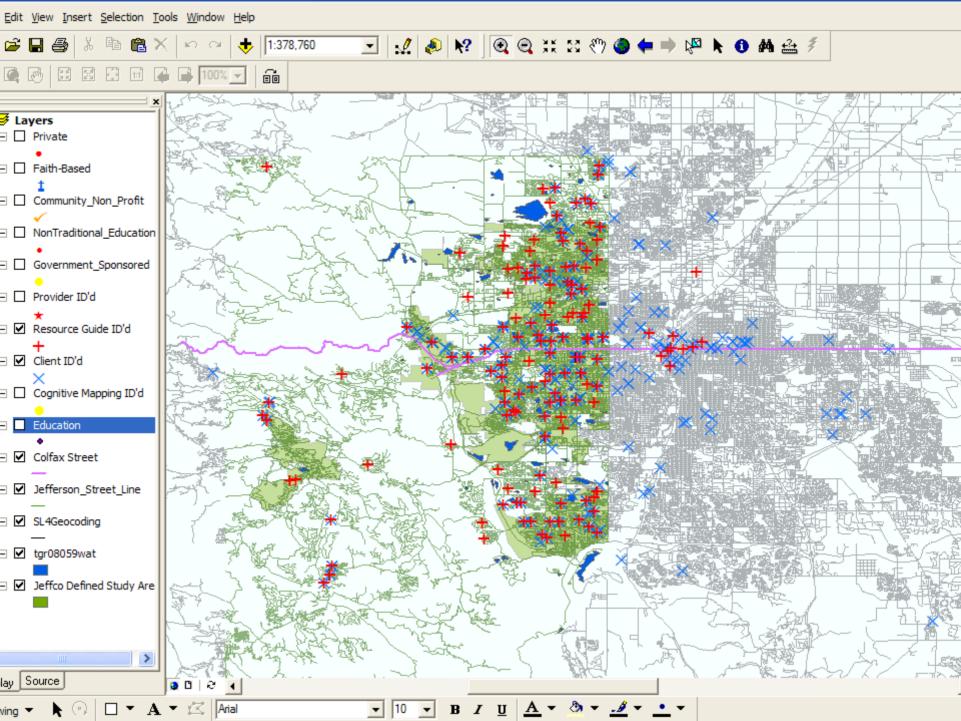
#### Education Resources: Cognitive Mapping ID'd vs Resource Guide ID'd

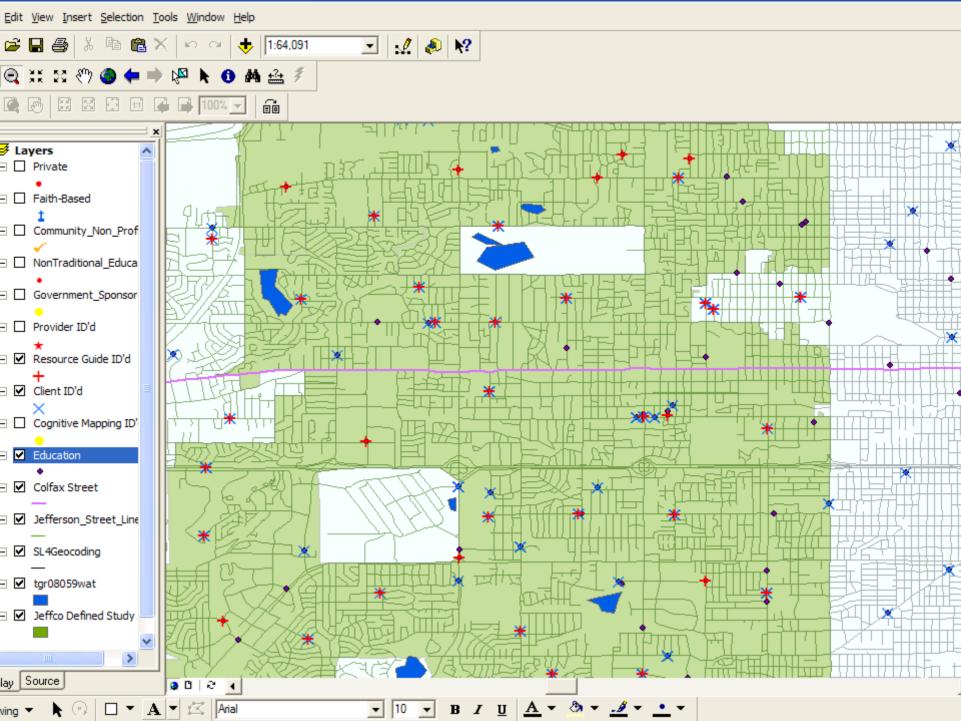


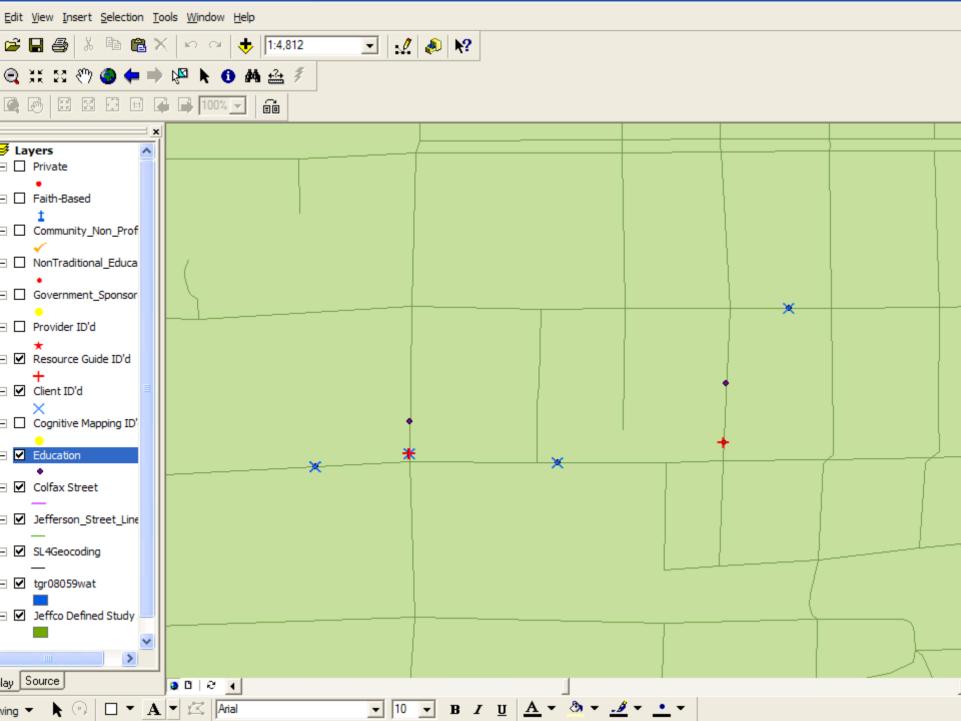
0 2.5 5 10 Miles

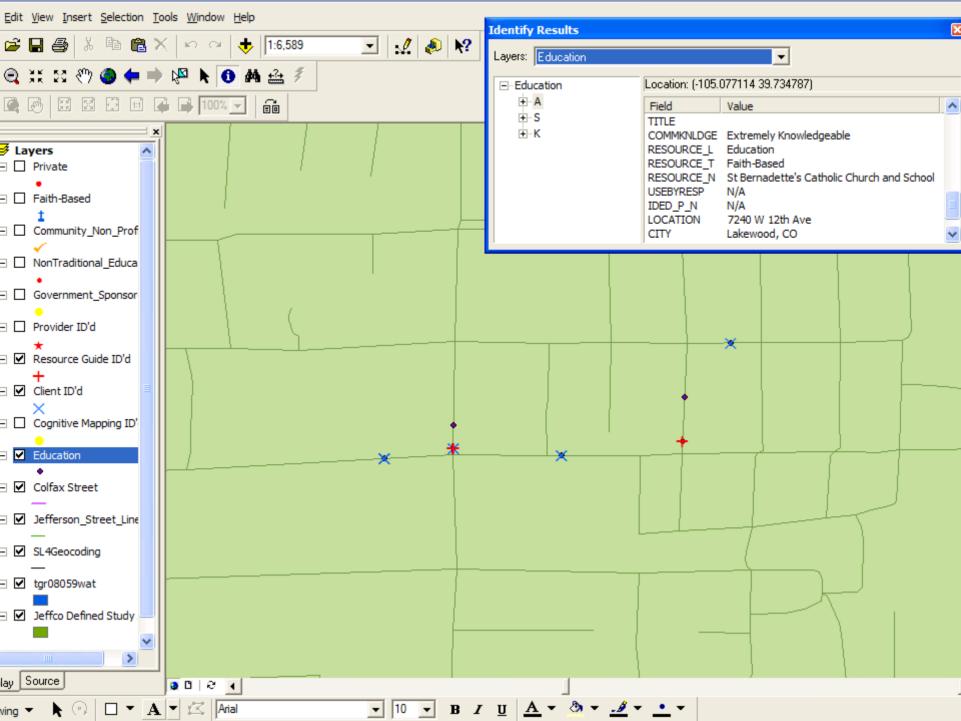
Data Sources: TIGER LINE2000 -- US Census Data Cognitive Mapping -- CIPP at CSU Resource Guide -- Jeffco Public Schools

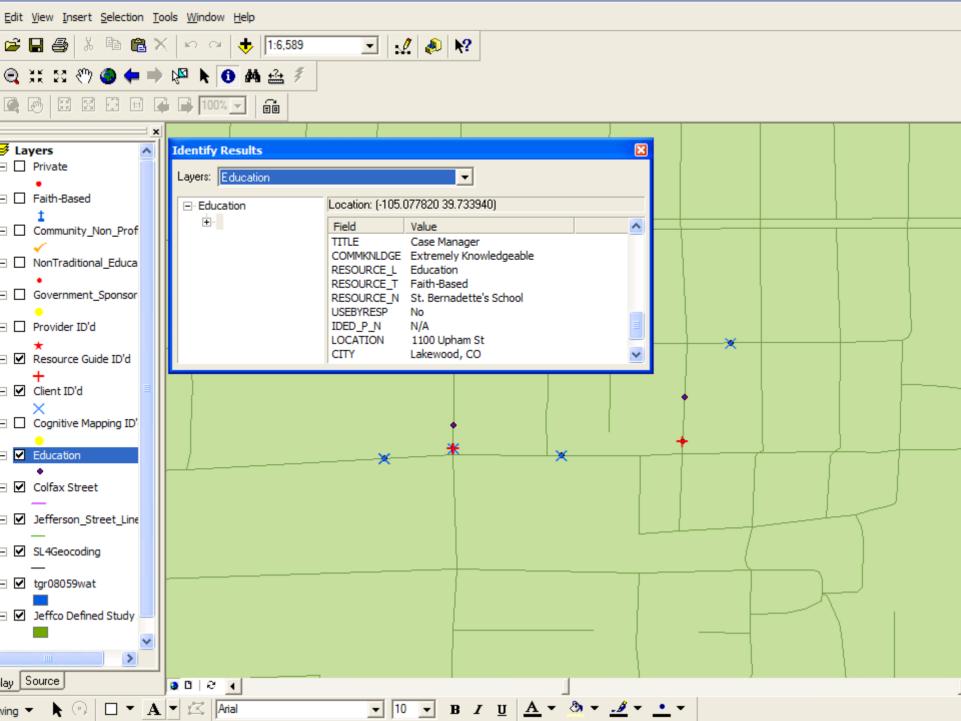
Map Created by Colorado Institute of Public Policy at Colorado State University In Fort Collins, Colorado Ν











Sobesky Academy South Lakewood Elementary School	2001 Hoyt St <b>8425 West 1st Avenue</b>	Lakewood <b>Lakewood</b>	80215 <b>80215</b>	303-982-5995 <b>303-982-7325</b>
South Table Mountain Preschool	17701 W 16th Ave	Golden	80401	
Southwest Montessori Preschool-Headstart	8032 W Jewell Ave	Lakewood	80232	
Special Education	1829 Denver West Drive	Golden	80401	303-982-6669
St Anne's Episcopal School	2701 S York St	Denver	80210	
St Bernadette's Catholic Church & School	7240 W 12th Ave	Lakewood	80214	
St Francis De Sales Church & School	301 S Sherman St	Denver	80209	
St Rose of Lima Catholic Church & School	1320 W Nevada Pl	Denver	80223	
St. Anne's Perochial School	7555 Grant PI	Arvada	80002	303-420-1280
St. Bernadette's School	1100 Upham St	Lakewood	80214	
Standley Lake High School	9300 West 104th Avenue	Westminster	80021	303-982-3311
Standley Lake Library	8485 Kipling St	Arvada	80005	
Stedman Elementary School	2940 Dexter St	Denver	80207	
Stein Elementary Stein Elementary: Bilingual Program	80 S. Teller Street 80 S. Teller Street	Lakewood Lakewood	80226 80226	303-982-7407 303-231-9161



### **Future Trends**

- Provider Resource Database
  - Searchable web-based provider resource database
  - Identification of physical and/or service areas with inadequate resources in relation to socioeconomic deprivation areas
- Needs Assessment
  - conduct comprehensive, quantifiable, and defensible needs assessments for
    - Grants
    - Strategic plan

# Benefits of GIS in resource identification

- A comprehensive database of existing services;
- A basis to build communication networks and cooperation among government and community providers;
- The ability to create an efficient system that avoids duplication of efforts;
- An understanding of the geographical distribution of resources;
- The identification of resources lacking in the county and specific communities; and
- Knowledge differences among diverse participant groups

**Competence** 

Health Benefits

Care

#### Quality

**Diversity** 

Colorado Institute of Public Policy Colorado State University