

# SERVICE INCIDENCE STUDY: ANALYSIS OF THE GEOGRAPHIC DISTRIBUTION OF WASHINGTON COUNTY EXPENDITURES AND REVENUES

*Prepared for the Washington County Auditor by  
Public Knowledge LLC*



## Executive Summary

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## **Washington County Service Incidence Study**

### **Executive Summary**

#### **A. Introduction**

##### **1. Purpose and Scope**

- The purpose of this study is to assist policy-makers by providing geographic information on Washington County's expenditures and revenues.
- The study identifies the distinct services delivered by Washington County. It allocates both the expenditures and revenues for each service among three geographic areas:
  - Incorporated
  - Urban unincorporated
  - Rural.
- The allocations enable a comparison of the expenditures and revenues for each service for each geographic area, the determination of an "expenditure-revenue differential."
- The current study updates a similar 1984 Portland State University (PSU) study that compared revenues and expenditures for County services across the three geographic areas.

##### **2. Historical Perspective**

###### ***Overview of 1984 Study Findings***

- The 1984 PSU study (covering Fiscal Year 1981-82) identified an overall net transfer into the rural area.
  - The transfer equated to about 14 percent of total expenditures, drawn roughly equally from the incorporated and urban unincorporated areas
  - The Road Fund explained nearly all of the net transfer to the rural area
- The pattern differed for particular services, however. Notably, Sheriff's services reflected a significant transfer from the incorporated area to the urban unincorporated area.

###### ***County Policy***

- Transfers of funds across geographic areas are not necessarily undesirable. For example, many service needs differ geographically.
- Funding for County services comes not only from local taxes, but also from state and federal sources for many programs. One consequence is that the County has limited discretion over certain programs (as recognized by the 1984 study).

- Nevertheless, Washington County has placed a high priority on an equitable geographic distribution of expenditures to obtain maximum county-wide benefit from general purpose revenues. Several related policies were included in the *County 2000* plan (adopted in 1986).
- Consistent with *County 2000* and to address the findings of the 1984 study the County undertook certain key initiatives; for example:
  - Established the Enhanced Sheriff's Patrol District (ESPD)
  - Prepared Major Streets Improvement Plan (MSTIP)
  - Formed the Urban Road Maintenance District (URMD).

**Demographic and Economic Change**

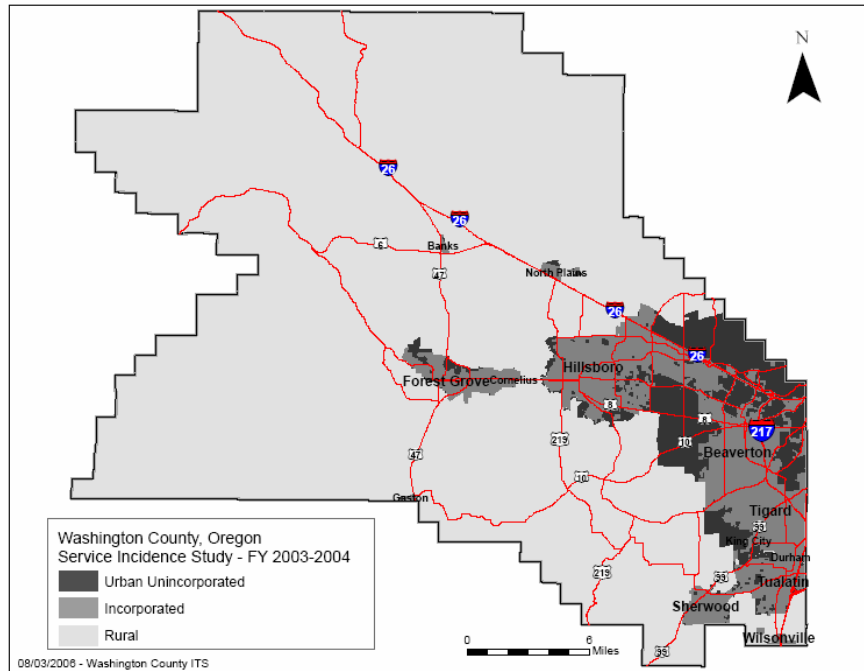
- Since the prior study Washington County has grown significantly, with a higher proportion of the population now in cities

Factors:	Study Years	Total	Distribution within County		
			Cities	Urban Unincorp.	Rural
Population	2003-04	480,200	58.3%	35.9%	5.8%
	1981-82	245,808	43.4%	45.3%	11.3%
Households	2003-04	184,903	58.5%	36.2%	5.3%
	1981-82	90,240	48.6%	40.6%	10.8%
Personal Income	2003-04	\$9.59 billion	55.9%	37.8%	6.3%
	1981-82	***	38.3%	50.5%	11.2%
Assessed Value	2003-04	\$33.84 billion	58.8%	34.3%	6.9%
	1981-82	\$7.12 billion	45.4%	46.4%	8.2%

\*\*\* Total personal income amount not published in 1984 report

**3. Approach**

- The current study follows the general approach of the 1984 PSU study, but analyzes services in more detail than was feasible in the previous study. The current study:
  - Uses primarily Fiscal Year (FY) 2003-2004 information.
  - Specifies geographic boundaries applicable in 2003-2004 to identify the incorporated, urban unincorporated, and rural areas of Washington County (see the map on the following page).
  - Analyzes over 350 County programs and sub-programs.
  - Relies on the best sources of information available to identify the location of County services, often specific address information.
  - Utilizes County Geographic Information System (GIS) technology to assign addresses to study geographic areas (with assistance from County Information Technology Services).



- The study transforms the percentage of service going to each of the three study areas into costs (expenditures) assigned to each area. It applies level-of-effort information available for certain services; for example:
  - Cost-based data
  - Type of incident
  - Priority rankings.
- Revenue allocations were developed by County Finance Division. The geographic allocation bases for the major sources of funds included, for example:
  - Property taxes based on assessed valuation
  - State and federal intergovernmental revenue based on personal income
  - Fees based on geographic source of origin
  - Consumption-based taxes based on population
  - State transportation funds based on vehicle registrations.
- The study computes an “expenditure-revenue differential” for each County service for each of the three geographic areas.
  - Where the allocated expenditures for the service for a given area exceed the allocated revenues, the differential is expressed as a “transfer-in” (positive figure).

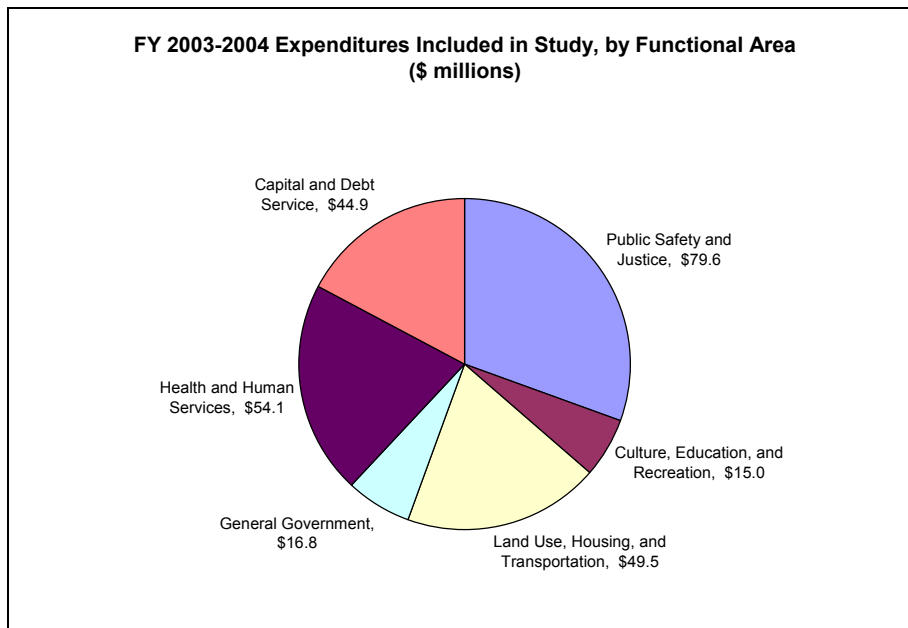
- Where the allocated expenditures for the service for a given area are less than the allocated revenues, the differential is expressed as a “transfer-out” (negative figure).
- The geographic allocations are intended to be reasonable and prudent given the available data, but are not *precise*.

## B. Study Results

### 1. Overall Results

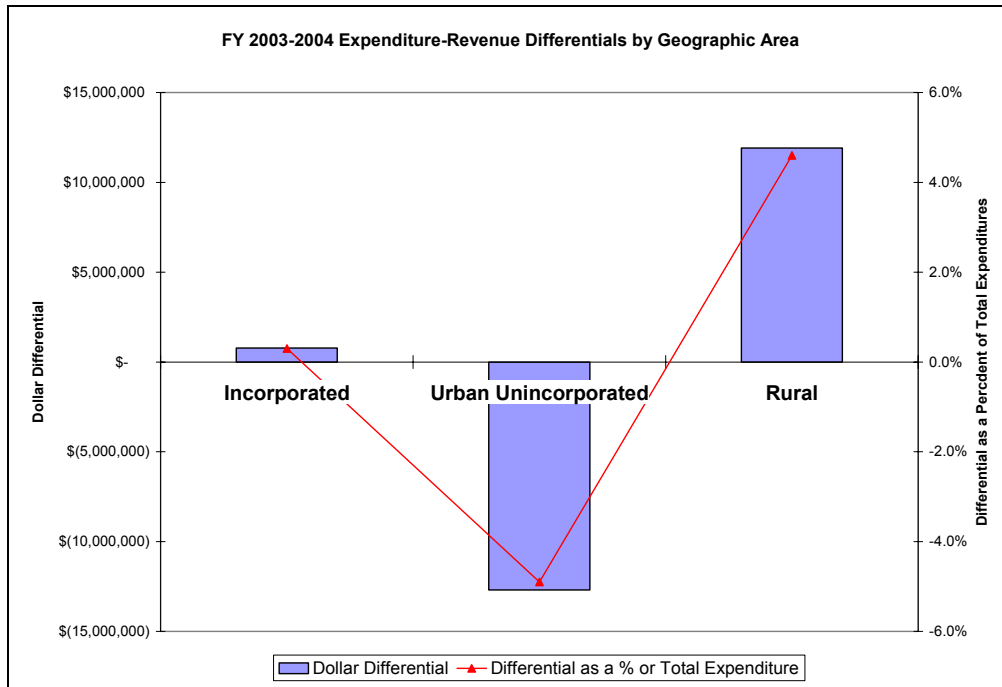
#### ***Expenditures by functional area:***

- About \$260 million of total expenditures are included, distributed among functional areas as shown below.



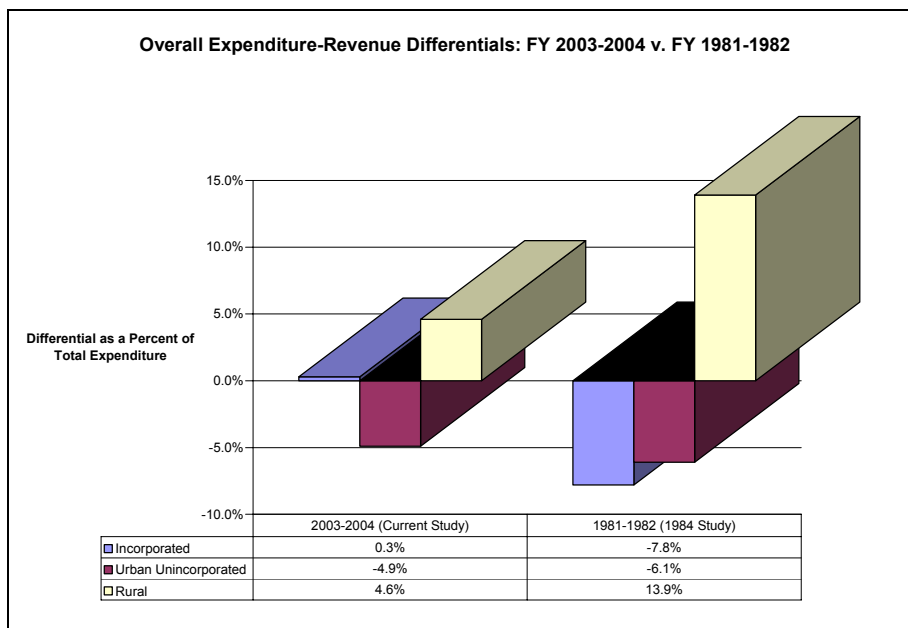
#### ***Overall net transfers:***

- Overall there was a net transfer-in to the rural area, coming from the urban unincorporated area.
  - Measured as a percentage of total expenditure, the rural area received about 4.6 percent more service than it contributed in revenue.
  - The urban unincorporated area contributed about 4.9 percent more revenue than it received in services.
  - The incorporated area was in an approximately neutral position.



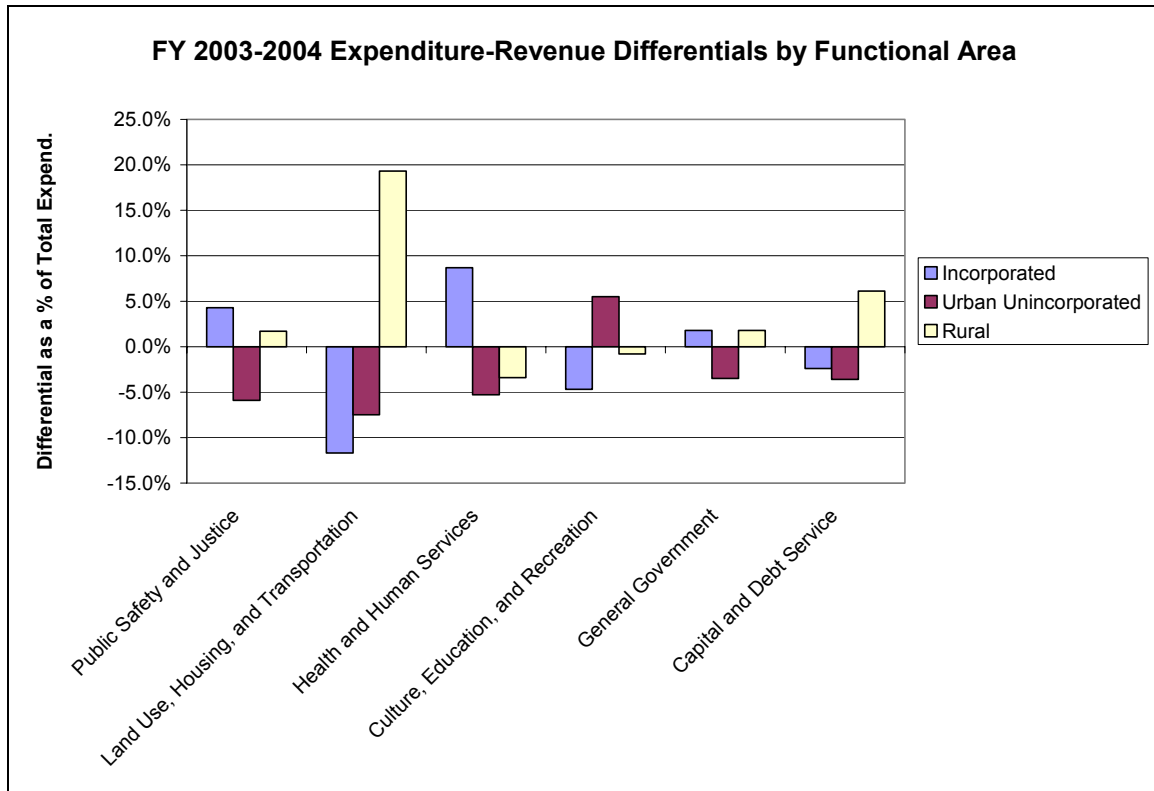
**Current study compared to previous study:**

- The proportionate overall differentials have decreased notably since the prior study.
  - The incorporated area transfer-out has been eliminated.
  - Measured as a percentage of total expenditure, the net transfer-in has diminished for the rural area.



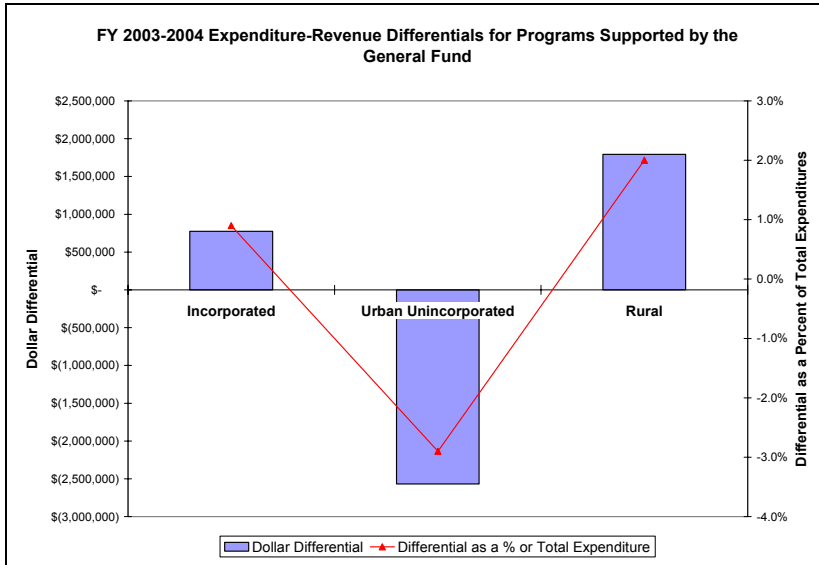
**Net transfers by functional area:**

- The expenditure-revenue differential patterns differed across the chief functional areas of County expenditures.
  - Geographic areas that received transfers-in for certain services experienced transfers-out for others.
  - For most services the geographic area differentials were relatively small, less than five percent of total expenditures (transfers either in or out for any given geographic area).
  - The relatively larger expenditure-revenue differentials for the Land Use, Housing, and Transportation group are explained primarily by one program, LUT Operations and Maintenance.
  - The relatively large transfer-out for Public Safety and Justice Services for the urban unincorporated area is explained in part by the Enhanced Sheriff's Patrol District tax paid by property owners in that area.



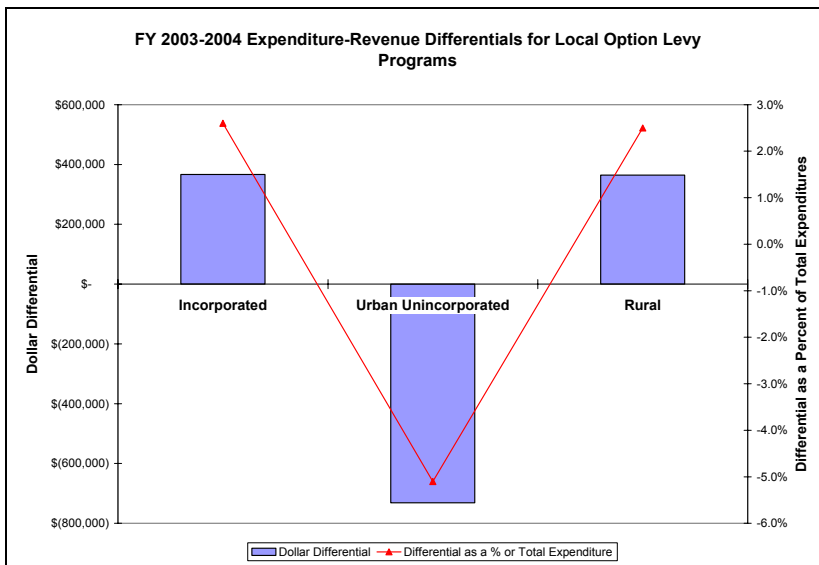
**Programs supported by the General Fund:**

- Most General Fund revenue is derived from a county-wide property tax. Considering just the programs supported by General Fund revenue, there were net transfers-in to the incorporated and rural areas and a net transfer-out from the urban unincorporated area.



**Programs supported by the Local Option Levy:**

- The Local Option Levy is a county-wide property tax that supports several public safety and justice programs. Considering just the programs supported by Local Option Levy revenue, there were net transfers-in to the incorporated and rural areas and a net transfer-out from the urban unincorporated area.





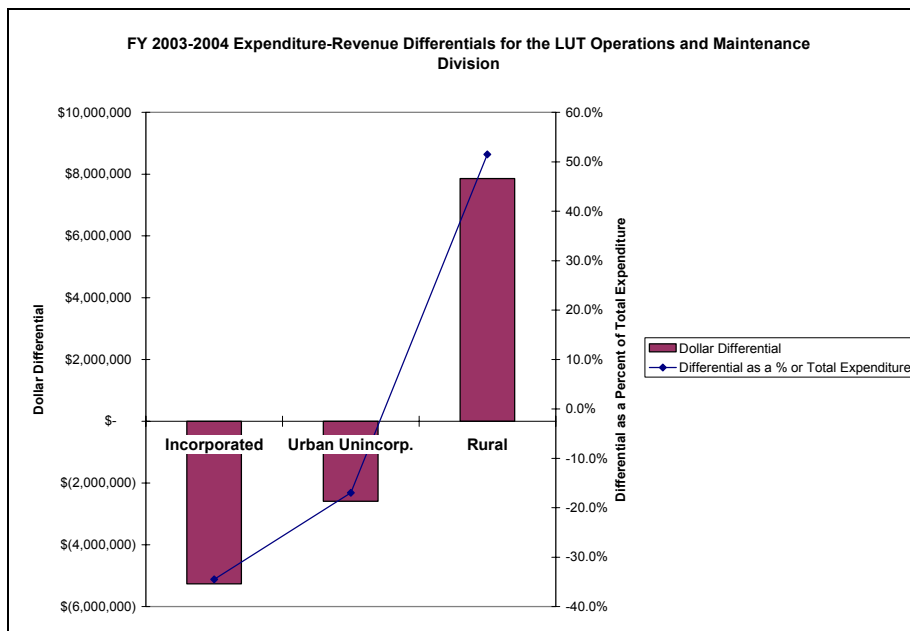
## 2. Selected Programs

### Largest differentials:

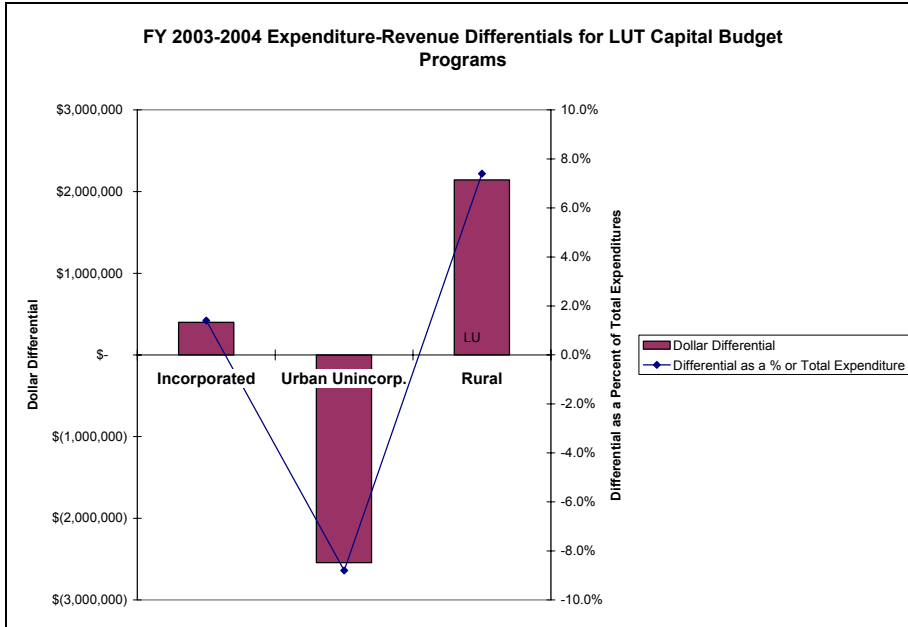
- A limited number of County organizations and programs explain a large share of the overall differentials. Several are summarized below.

### Transportation programs:

- The LUT Operations and Maintenance Division expended about \$15.3 million in FY 2003-2004 and its activities explain a large portion of the overall net transfer to the rural area. The transfer to the rural area for this program represented about 66 percent of the net overall rural transfer-in for the County.

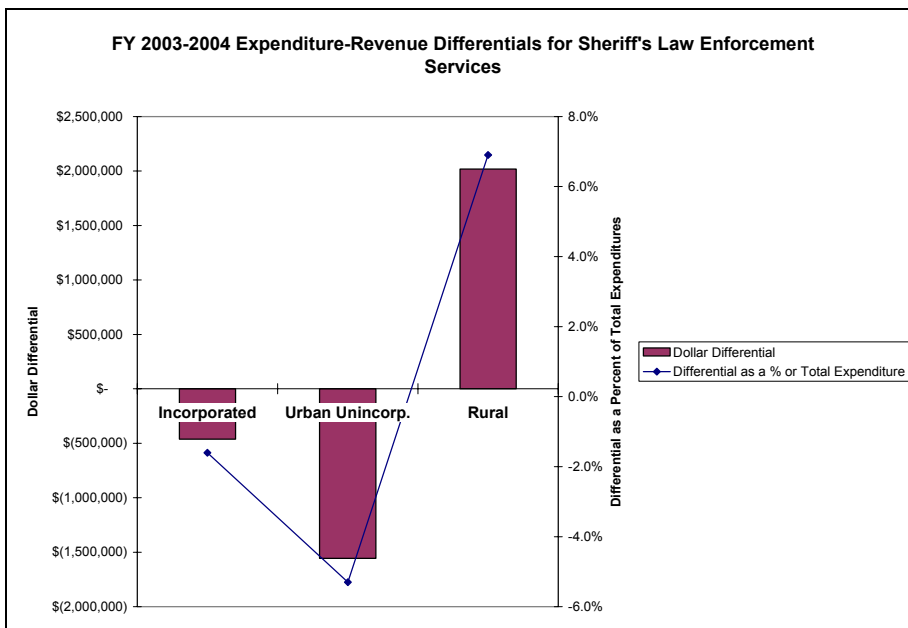


- Rural roads remain an important component of the county-wide road system.
- The Urban Road Maintenance District (URMD) now provides added support for the urban unincorporated area.
- The distributional patterns for particular transportation capital budget programs were mixed, but overall there was a net transfer-out from the urban unincorporated area and a net transfer-in to the rural area.
- The following chart represents total FY 2003-2004 expenditures of about \$29 million for all LUT capital budget programs combined.



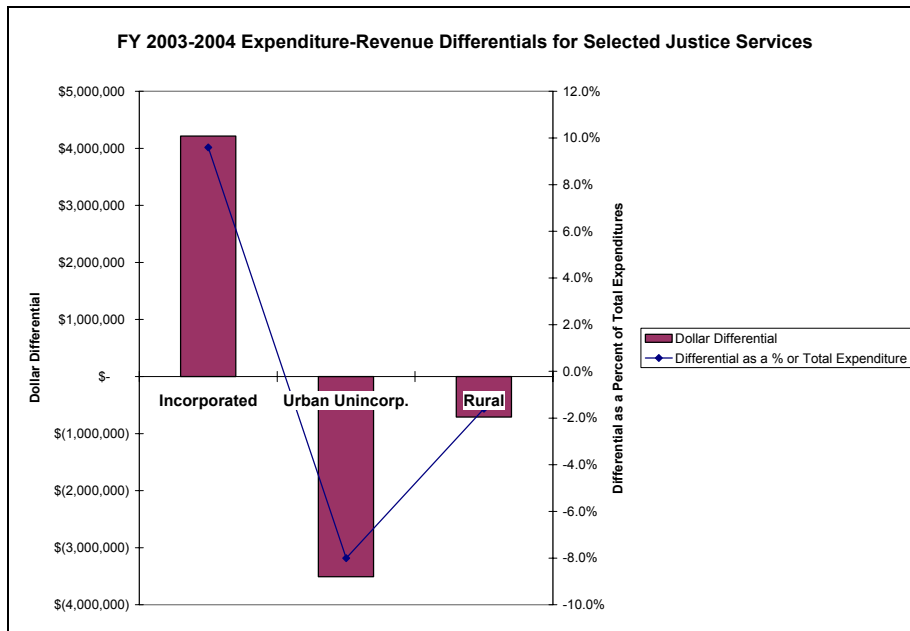
**Sheriff's Law Enforcement services:**

- Sheriff's Law Enforcement services include Patrol, Investigations, and several related functions, comprising a total of about \$29.1 million expenditures in FY 2003-2004.
- In FY 2003-2004 there was a significant transfer-in to the rural area.
- Taxpayers in the urban unincorporated area provide funding for the Enhanced Sheriff's Patrol District, which partly explains the net transfer-out for that area.



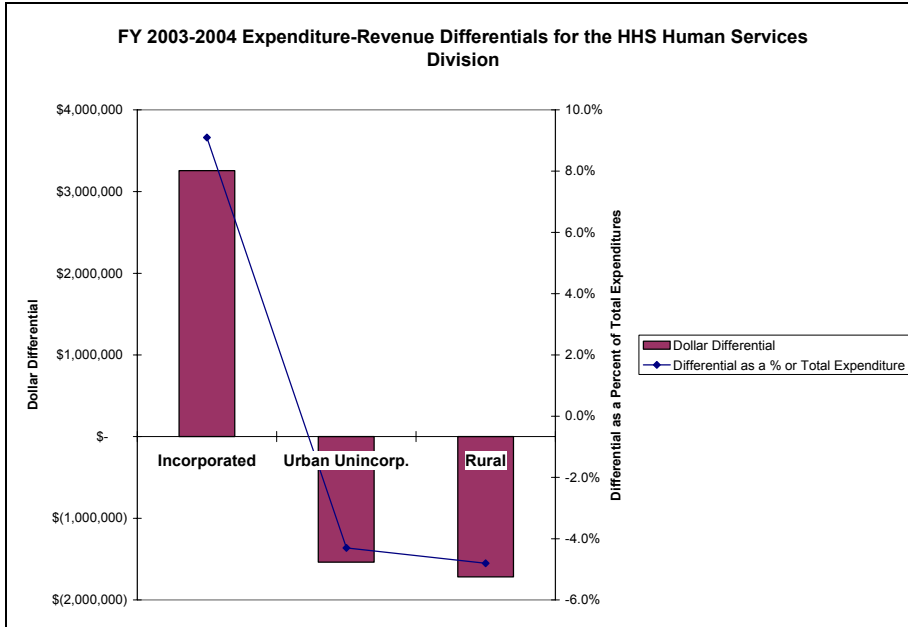
**Justice Services programs:**

- The major programs supporting the “back-end” (post-arrest) component of the justice system each reflected a similar expenditure-revenue differential pattern. The chart below shows the combined differentials of Jail Services (operated by the Sheriff’s Office), the District Attorney, Community Corrections, the Juvenile Department, and Jail Health. Together these services expended about \$43.9 million in FY 2003-2004.
- Overall for these services there was a net transfer-in to the incorporated area in FY 2003-2004, supported primarily by a transfer-out from the urban unincorporated area.



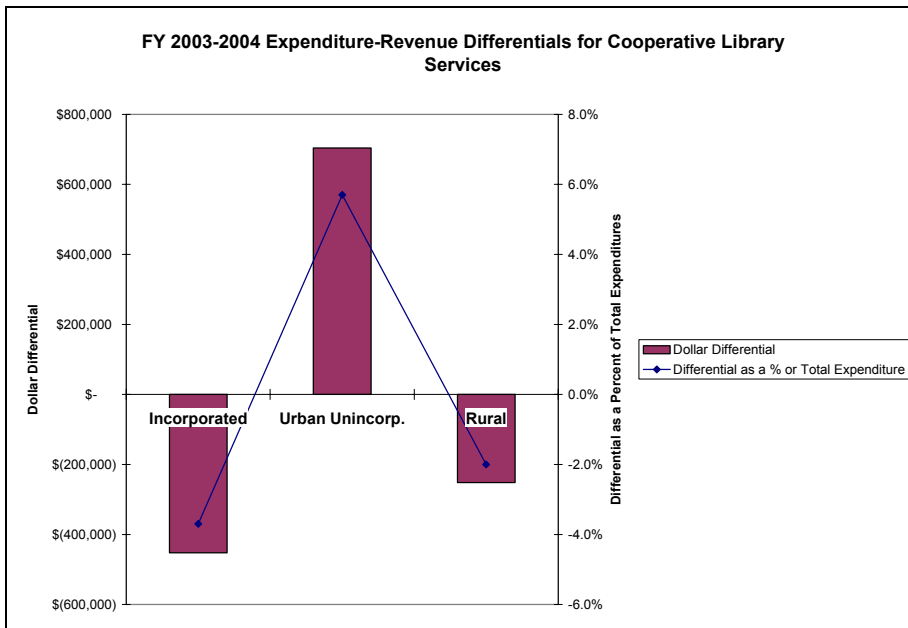
**Human Services Division of the Department of Health and Human Services:**

- Total expenditures for the HHS Human Services Division in FY 2003-2004 were about \$35.8 million; about \$22.1 million of this amount was for Developmental Disabilities Services; the balance was for Mental Health, Alcohol and Drug, and Children’s Human Services. The majority of the funding derives from State and federal sources.
- The incorporated area received a net transfer-in for these services in FY 2003-2004, as shown in the following chart.



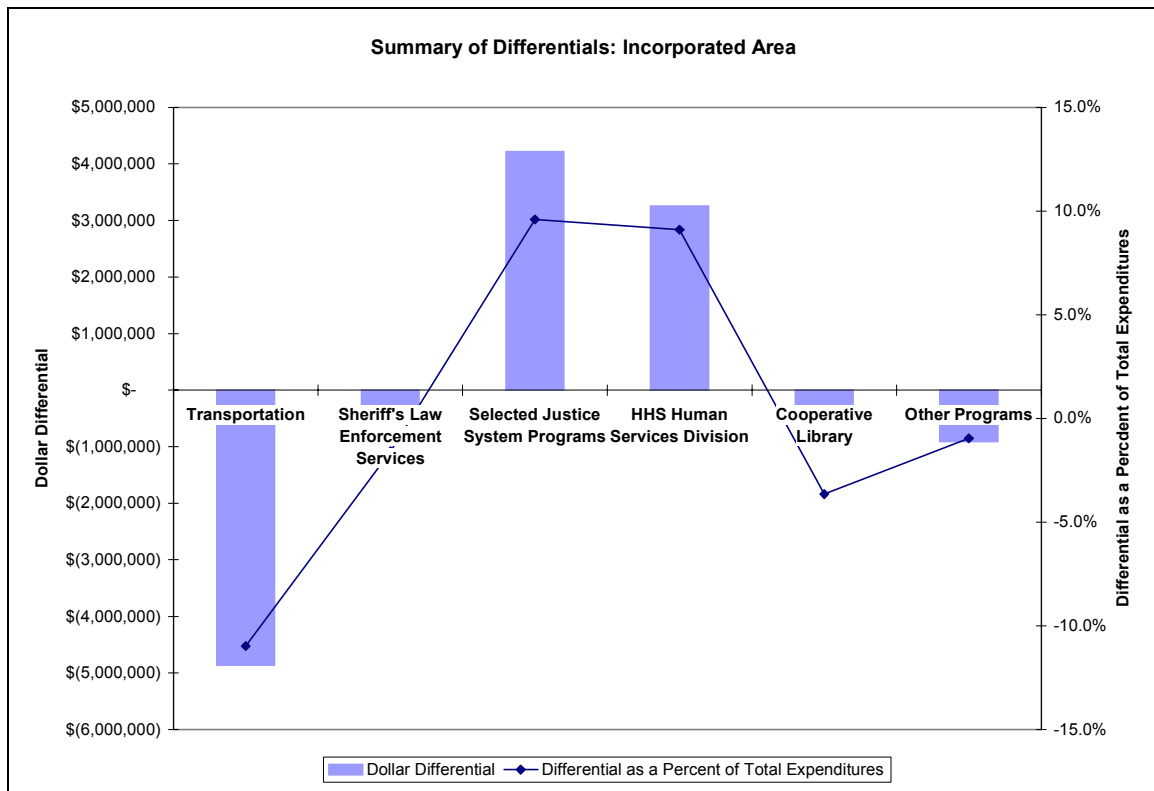
**Cooperative Library:**

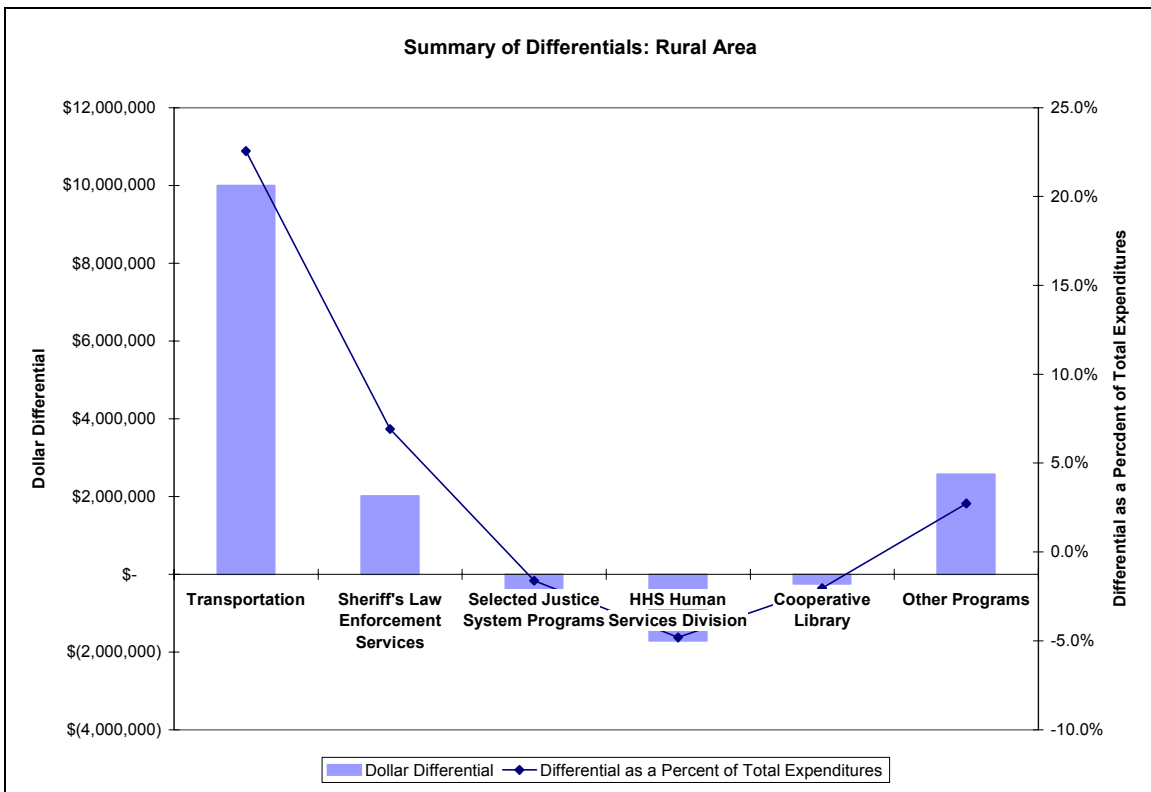
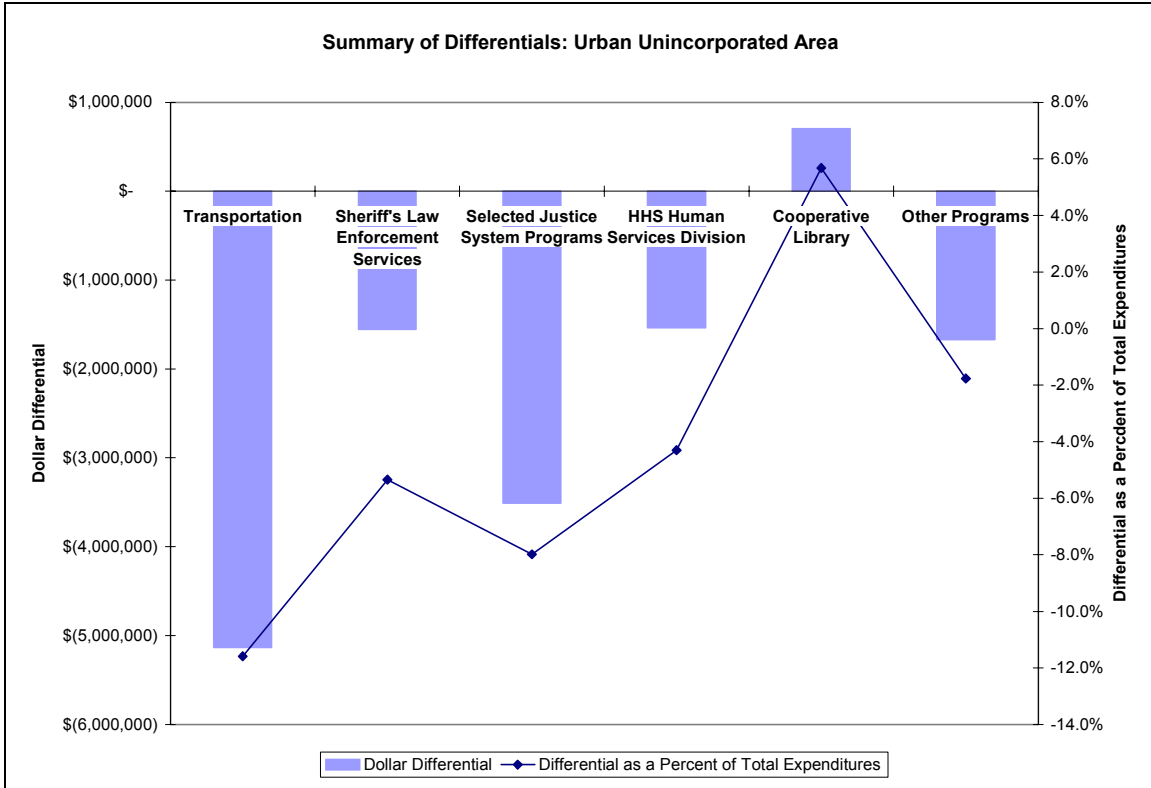
- The Cooperative Library was one of the few services with a net transfer into the urban unincorporated area.
- For 2003-2004 there was a net transfer from the incorporated to the urban unincorporated area for Cooperative Library Services
- The 1984 study had shown a small net transfer in the other direction
- The chart below reflects about \$12.4 million of total expenditures. City Library expenditures are not included here.



**Re-cap by geographic area:**

- The distributional patterns by geographic area were mixed, depending on the particular service or group of services; for instance:
  - The incorporated area received net transfers-in for Justice System and HHS Human Services programs, but experienced a significant net transfer-out for Transportation services.
  - The urban unincorporated area contributed transfers-out for most services, with the exception of the Cooperative Library.
  - The rural area received net transfers-in for Transportation and Sheriff's Law Enforcement services, but contributed transfers out for certain other services.
- Charts reflecting each of the incorporated, urban unincorporated, and rural areas appear below and on the following page.





### **3. Comparisons to 1984 Study by Type of Service**

- Comparisons between the 1984 study findings and those of the current study should be made cautiously, for several reasons. Nevertheless, certain broad changes are noteworthy, as summarized below (all comparisons treat the differentials as percentages of total expenditures for the specified services).
  - For certain key services particular geographic areas have switched between net transfer-in and net transfer-out positions.
    - The incorporated area transfer-out for Sheriff's Law Enforcement Services has been reduced notably and the urban unincorporated area has shifted to a net transfer-out position for these services (explained in part by the advent of the Enhanced Sheriff's Patrol District).
    - For the Cooperative Library the incorporated area experienced a transfer-out and the urban unincorporated area a transfer-in in FY 2003-2004, when previously these positions were reversed.
  - The relative size of the differentials decreased for most services; for example:
    - The distributional pattern of LUT Operations and Maintenance (Roads) operating expenditures was similar in FY 2003-2004 to the previous study, but the percentage differentials became somewhat smaller for the urban unincorporated and rural areas than they were before.
    - The percentage differentials for LUT Capital Projects (represented by the Serial Levy in the 1984 study) diminished notably for the incorporated and rural areas.
    - The percentage differentials were generally smaller for several other services.
  - The relative size of the differentials has grown for only a few services. For certain justice services – the Jail and the District Attorney – the percentage transfer-in differential for the incorporated area grew since the previous study, and the percentage transfer-out differential for the urban unincorporated area increased.