

**Theobald/RPI Study Group  
Synopsis of RPI Study  
Fiscal Impact Analysis (July, 2006)**

**Introduction and Methodology**

This report evaluates departmental operations and capital costs for county departments in 2005 (base year) as well as estimating the cost of maintaining existing levels of service to year 2015.

The purpose of this fiscal impact report is to enable the county to make a full cost accounting of the impacts of new growth and development on local economy, public infrastructure, fiscal resources, revenues, land use, and environmental and social resources. This report analyzes existing costs (base year 2005) and potential growth within Ouray County to year 2015.

The report is a useful tool for Ouray County because it provides a means to:

1. Establish base line information (2005 COSTS X PROJECTED NUMBER OF NEW RESIDENTS/UNITS IN 2015)
2. Calculate the incremental costs of growth
3. Link land uses to fiscal reality
4. Establish a basis for calculating revenue sources

**Important Concepts**

1. Level of Service (LOS)

In this report level of service refers to the provision of county services such as road maintenance, police, fire, social services, etc. The base is the level of service at the time of the study. (It does not assume that this LOS is acceptable or not acceptable.) If the population grows, thus increasing demand on services, and at the same time available revenue to pay for these services does not increase at a rate to fund the increased demand, then the level of service will decrease. This may result in, for example, deteriorating roads, inadequate police patrols, etc. LOS data also provides a means of comparing Ouray County services to those of similar counties or national standards.

It is very important to note that incremental costs due to growth in this report represent the cost of maintaining the current level of service and a deficit is not necessarily a projection of a negative balance in the county budget. Rather, it represents a proportionate degradation from current levels of service. This means focus should not be on the actual numbers projected. Negative numbers are a relative means of understanding that a proportional reduction in services may occur if revenues do not match growth.

2. Projections vs. Forecasting

This report uses projections and not forecasting in its measurements. Projections are an “if-then” statement based on historical trends. Thus, if *variable x* grew at 10 % over the last ten years and the next ten years are similar, then *variable x* will continue to grow at ten %. Projections make the assumption that a trend observed over time will continue into the future. Projections are particularly reliable over 5 – 15 year periods of time. Because projections are based on historical trends, they take into account the typical ups and downs over time.

## **Existing Conditions**

### **Ouray County Demand Units 2005 Base Year**

Ouray County is projected to gain approximately 1,700 new residents by or before 2015 if current trends continue.

Housing stock is expected to increase by more than 1000 in the entire county on or before 2015 if current growth trend continues.

*Note: non-residential sq. footage (all structures other than housing) is shown to account for its share of current LOS and to ensure that the cost of providing service for residential units is not overstated.*

## **Road and Bridge**

### **Measuring Current and Future Projected Traffic**

New development generates increased traffic and increased traffic directly contributes to the need for increasing road system capacity. Measuring current and projected demand for road maintenance and capital improvement\* involves two steps:

1. Inventory existing land uses and develop future land use projections.
  2. Calculate traffic produced by current and future land uses.
- Capital improvements include a permanent structural improvement or the restoration of a road's overall value or an increase in its useful life. RPI also includes buildings, fleet and other equipment.

### **Non-residential Land Use Inventory and Traffic**

Using the County Assessors database and other sources, non-residential square footage in the county was inventoried. This inventory was used to calculate traffic generated by the non-residential sector. The unit of measurement used is the Average Daily Vehicle Trip (ADT). The estimate for traffic generated by non-residential development is calculated by applying trip generation rates developed by the Institute of Transportation Engineers to the 2005 inventory of non-residential square footage. The total 2005 sq. ft. floor non-residential floor area is 199,695 (unincorporated) and 947,378 (entire county).

Figure 4. Average Daily Trip Generation Rates and Adjustment Factors from ITE

| Average Vehicle Trip Ends     | Weekday Average Daily Trip Rates  |                                      |
|-------------------------------|-----------------------------------|--------------------------------------|
|                               | Residential<br>(per Housing Unit) | Non-residential<br>(per 1,000 Sq Ft) |
| <b>Residential</b>            |                                   |                                      |
| Single Family Detached-Duplex | 9.57                              |                                      |
| Attached Housing              | 6.63                              |                                      |
| <b>Nonresidential</b>         |                                   |                                      |
| Church                        |                                   | 9.1                                  |
| General Commercial            |                                   | 42.9                                 |
| Lodging                       |                                   | 36.4                                 |
| Office/Institutional          |                                   | 11.0                                 |
| Retail                        |                                   | 42.9                                 |
| Warehousing                   |                                   | 5.0                                  |

Source: Institute of Transportation Engineers *Trip Generation* 6<sup>th</sup> Edition

Figure 7. 2005 Ouray County Trip Generation

| Non-Residential                    | 2005   |
|------------------------------------|--------|
| Unincorporated Average Daily Trips | 5,180  |
| All County Average Daily Trips     | 29,370 |
| <b>Residential</b>                 |        |
| Unincorporated Average Daily Trips | 15,050 |
| All County Average Daily Trips     | 25,220 |
| <b>Total</b>                       |        |
| Unincorporated Average Daily Trips | 20,230 |
| All County Average Daily Trips     | 54,590 |

NOTE: RPI DIFFERS FROM THE THEOBALD STUDY IN THAT THEOBALD USES VEHICLE MILES TRAVELED (VMT), NOT AVERAGE DAILY TRIPS (ADT).

### Growth Projections and Projected Traffic to 2015

NOTE: ACCORDING TO RPI, THE NON-RESIDENTIAL GROWTH RATE FOR THE COUNTY COULD NOT BE ESTABLISHED BASED ON ASSESSOR DATA. RPI USED THE PROJECTED GROWTH IN OURAY COUNTY EMPLOYMENT BETWEEN 2005 AND 2015 (27% TOTAL INCREASE) PROVIDED BY THE COLORADO DEPARTMENT OF LOCAL AFFAIRS (DOLA) DEMOGRAPHY SECTION AND THE CENTER OF ECONOMIC AND BUSINESS FORECASTING.

Non-residential sq. footage in the unincorporated county is expected to increase to just over 250,000 sq. ft. in 2015. This assumes the same proportional mix in land use that currently exists.

Residential units in the unincorporated county will increase by over 750.

## Projected 2015 Traffic Summary

Traffic is expected to increase 42% by 2015. Residential land uses are expected to contribute 5 times more to the increase in traffic than non-residential uses.

The total ADT's will increase in the unincorporated county from 20,230 in 2005 to 28,840 by 2015.

## Road Operations and Maintenance Level of Service

A typical residential unit produces less than half of the road and bridge annual revenue necessary to cover the \$550 annual cost of maintaining operations and maintenance LOS needed to serve the traffic generated by that residence.

Maintaining LOS for equipment and facilities and the targets set by the R&B capital improvements plan (prior to 2009 budget) will cost \$3,895 per residential unit. Residential units do not produce earmarked capital facilities revenue for R&B resulting in a 100% capital improvements shortfall.

The lack of earmarked funds for capital improvements in the R&B fund could result in an over \$2.6 million shortfall in maintaining LOS by 2015.

Figure 9. Unincorporated Ouray County Growth Projections and Traffic Projections Summary

|                                               | 2005    | 2015    |
|-----------------------------------------------|---------|---------|
| Unincorporated County Housing Units           | 1,572   | 2,324   |
| Unincorporated County Non-Residential Sq. Ft. | 199,695 | 253,700 |
| Residential Average Daily Trips               | 15,050  | 22,240  |
| Non-Residential Average Daily Trips           | 5,180   | 6,600   |
| Total Average Daily Trips                     | 20,230  | 28,840  |

Sources: U.S. Census, CO Demography Section housing unit projections, Ouray County Assessor's Records, Institute of Transportation Engineers Trip Generation Manual, 6<sup>th</sup> Edition

With the projected traffic in 2015, *in 2005 real \$'s*, it will cost \$1,652,000 per year to maintain current LOS, a 43% increase. Lower expenditures will result in lower levels of service. This does not account for inflation. (See RPI Fig. 10 for basis)

## Total Planned Capital Improvements (2005-2015)

The county has a capital improvement plan projected to 2015 in place. The total cost of the plan is \$2,586,000 for surface, drainage, sub-grade, sideslope, and intersection improvements.

In order to calculate a cost per ADT in 2015, RPI projected traffic to 2023. The county plan is designed to accommodate traffic for 15 years. Thus, the traffic in 2023, 15 years from the halfway

point of the plan, serves as the projected level of traffic for which the improvements are designed. This methodology results in a cost per ADT of \$167.00 to maintain LOS needed to achieve the capital improvements plan

Figure 13. Cost per Average Daily Trip – Planned Improvements and Buildings, Land and Equipment

| Road Capital Facilities Level of Service                   |             |
|------------------------------------------------------------|-------------|
| LOS for Planned Improvements (Cost per Average Daily Trip) | \$167       |
| Incremental Expansion (Cost per Average Daily Trip)        | \$240       |
| Total Capital Facilities (Cost per Average Daily Trip)     | \$407       |
| Maintain LOS for 2006-2015 Traffic (2005 dollars)          | \$3,504,000 |

Given projected growth it will require about \$3.5 million of capital expenditures to maintain the capital facilities LOS by 2015. This works out to about \$3900.00 per residential unit. (Stated in 2005 \$'s)

In addition, operations and maintenance cost \$548 per residential unit each year. On an annual basis, operations and maintenance revenues are less that 5% from covering annual costs of maintaining LOS in 2015. This magnitude of shortfall can be adapted to or ameliorated without significant policy change, but should serve as a warning that current annual revenues scarcely cover the costs of maintaining LOS. Significant increases in cost (as have occurred) and relative declines in revenues (as have occurred) could significantly increase the rate of decline in LOS.

## Per Residential Unit Road and Bridge Revenues

Figure 18. Annual Revenues per Residential Unit

| Source                | Revenue Per Residential Unit |
|-----------------------|------------------------------|
| Property Tax          | \$ 43                        |
| Registration Fees     | \$ 14                        |
| HUTF                  | \$ 87                        |
| General Fund Transfer | \$ 29                        |
| Impact Fee            | \$ 79                        |
| Total                 | \$ 252                       |

Figure 22. Annual Cost Benefit, Single Family Units

|                       | Annual per Single Family Unit<br>(2005 dollars) | One Time Capital Facilities<br>per Unit<br>(2005 dollars) |
|-----------------------|-------------------------------------------------|-----------------------------------------------------------|
| Costs Per Unit        | \$548                                           | \$3,895                                                   |
| Revenue Per Unit      | \$252                                           | \$ 0                                                      |
| Per Unit Cost-Benefit | (\$296)                                         | (\$3,895)                                                 |

This chart indicates that residential units do not pay the full cost of maintaining LOS for R&B. Further, since there is no way to directly fund capital facilities from residential revenues, there is a 100% shortfall in capital facilities LOS.

## **Considerations and Recommendations on R&B**

1. The R&B department has the most direct relationship to land use patterns thus land use and fiscal planning must be closely related.

2. As state and federal revenues fluctuate and may be unpredictable, an increase in an R&B mil levy may be the only way to develop reliable and adequate revenue.

3. Residential units do not produce earmarked funds for capital facilities revenue for R&B, resulting in a 100% shortfall. Lack of these funds could result in a \$2.6 million shortfall by 2015 in maintaining current LOS.

4. Impact fees help redirect financial burden to new development but are inadequate to cover projected costs and are subject to restrictive state laws.

## **Administration**

Growth impacts on county administration are not as visible as on some other departments, but they are real and will impact quality and efficiency of administrative services.

NOTE: SEE APPENDIX B FOR A LIST OF GENERAL FUND DEPARTMENTS.

County Administration serves the entire county, thus, this analysis includes the entire county.

## **Proportionate Share**

The breakdown between residentially driven demand for administration and non-residentially driven demand is the amount demand for county administration that each of these development types generate. Residential development means more people and more demands on administration. Non-residential development drives more commerce and activity that ultimately causes more demand for administration. Proportionate share is the breakdown between residential and non-residential demand.

Currently, (2005) residential share of administrative services is 88% compared to 12% non-residential demand.

Figure 23. Administration Proportionate Share



## Operations Level of Service

Figure 24. Administration Operations Current LOS

|                                             | Administration Staff | Operations and Maintenance (Annual Cost) |
|---------------------------------------------|----------------------|------------------------------------------|
| Per 1,000 Residents                         | 5.1                  | \$ 320,628                               |
| Per 100,000 s.f. Non-Residential Floor Area | 0.24                 | \$ 15,061                                |

The average cost of staffing one administrative FTE is about \$62,615 annually (2005). This means that for every 1000 residents the cost to the general fund is over \$320,000 and each 100,000 sq. ft. of non-residential development costs over \$15,000 per year.

## Capital Facilities Level of Service

Figure 25 Current Ouray County Administration Capital Facilities Level of Service

|                                             | Capital Facilities (One-Time Cost) |
|---------------------------------------------|------------------------------------|
| Per 1,000 Residents                         | \$ 712,102                         |
| Per 100,000 s.f. Non-Residential Floor Area | \$ 43,218                          |

## Per Unit Costs

New residential units cost administrative operations \$760 per unit while (one time) administrative capital costs are \$1688.

## Cost of Maintaining Current Level of Service for Administration (2015)

To maintain current LOS in 2015, it is projected that the county will need an additional \$594,517 in operational costs and 9.5 FTE's. Additionally, the county will need another \$1.3 million in land and buildings to house these employees. (In 2005 \$'s)

Figure 27. Costs of Maintaining Current LOS for Administration 2015

| 2015 Projection                     | Administration Employees Needed | Annual Operations Cost | Capital Facilities One Time Cost |
|-------------------------------------|---------------------------------|------------------------|----------------------------------|
| 1,734 New Residents                 | 8.9                             | \$ 555,988             | \$ 1,234,828                     |
| 255,822 New Non-Residential sq. ft. | 0.62                            | \$ 38,529              | \$ 110,562                       |
| Total                               | 9.5                             | \$ 555,988             | \$ 1,345,390                     |

NOTE: ANNUAL OPERATIONS COST SHOULD TOTAL \$594,517.

## Conclusions

1. On average it costs about \$62,615 annually per administrative employee.
2. In order to maintain current LOS, staff needs to be increased to 9.5 administrative employees at an **additional** annual cost of \$594,517.
3. Housing unit revenues are not currently covering the cost of serving those residents. Tourist tax dollars and/or revenues generated by other departments are probably covering the gap.
4. In order to accommodate the 9.5 additional administrative employees the county needs an additional \$1.2 million worth of space. Inadequate space limits the ability to hire the needed additional employees.

Note: All \$ figures above are in 2005 \$'s.

## Law Enforcement

Increase in law enforcement demand is driven by growth in residential population and growth in commercial and governmental/institutional activity due to population growth and increased traffic.

## Proportionate Share

### Traffic

It is estimated that about 18% of law enforcement duty is dedicated to traffic enforcement. About 77% of the traffic is generated by residential land uses and 23% attributed to non-residential land uses.

### Crime

82% of law enforcement's time is spent on crime and as a percentage of all law enforcement activity, residential uses account for about 72% of the demand for law enforcement while 28% is driven by activity related to non-residential development.

## Operations Current LOS (2005)

Figure 30. Ouray County Law Enforcement 2005 Operations Level of Service

|                                                   | Officers, Administration<br>and Support Staff (FTE) | Operations and<br>Maintenance<br>(Annual Cost) |
|---------------------------------------------------|-----------------------------------------------------|------------------------------------------------|
| Per 1,000 Residents                               | 1.3                                                 | \$ 75,832                                      |
| Per 100,000 Sq. Ft. Non-Residential Floor<br>Area | 0.2                                                 | \$ 13,135                                      |

## Projected Cost of Maintaining Current LOS in 2015

Maintaining the LOS for 1,734 new residents will require 2.3 additional law enforcement staff at a cost of \$131,498 (2005 \$'s) per year for operations and a one-time cost of about \$130,000 for additional space and equipment.

## Conclusions

1. The current LOS (2005) is 1.3 officers and staff per 1000 residents and .2 officers and staff per 100,000 sq. ft. of non- residential floor area. *This is below the national standard of 2 FTE's per 1000 residents.*
2. Operations costs are largely supported by general revenues (property and sales tax).
3. The sheriff's department will require significant capital investment to accommodate additional FTE's to maintain current LOS.

## General Fund Department Revenue Projections

RPI generated projected revenues on a “per unit” basis. Property tax revenue is based on an estimate of the “likely value” of residential units.

## Property Tax Revenue

Figure 34. Property Tax Revenue per Unit

|                               |    |         |
|-------------------------------|----|---------|
| Average Property Value        | \$ | 362,916 |
| Assessment Rate               |    | 0.0796  |
| Median Assessed Value         | \$ | 28,888  |
| County General Fund Mill Levy |    | 9.0740  |
| Annual Revenue per Unit       | \$ | 262     |

## Sales Tax Revenue

RPI county sales tax projections are based on taxable retail expenditures for full time and part-time residents buying or building new homes in the county. RPI estimates that the tax leakage rate (due to retail purchases out of county and on-line) is about 36%\* and has adjusted the retail expenditure accordingly. Also sales tax revenues are projected for *new residents and not existing resident's* expenditure patterns on the assumption that new residents will have higher income levels to afford housing in the county.

\* The Study Group believes this estimate is grossly understated. Thus, the annual sales tax revenue of \$170 per unit may be overstated.

Figure 36. Sales Tax Revenue per Unit

| Annualized Estimates                                               | Annual Household Expenditures on Taxable Retail | % of Occupied Housing Units (Census 2000) |
|--------------------------------------------------------------------|-------------------------------------------------|-------------------------------------------|
| Full Time Residential Unit                                         | \$ 32,741                                       | 73%                                       |
| Part Time Residential Unit                                         | \$ 9,822                                        | 27%                                       |
| Weighted Average Taxable Retail                                    | 26,640                                          |                                           |
| Total Taxable Dollars Spent in Ouray County (modified for leakage) | \$ 17,050                                       |                                           |
| Annual Sales Tax Revenue per Unit                                  | \$ 170                                          |                                           |

## Other Revenue Sources

Figure. 38. General Fund Revenues: Other Revenue

| Source                      | Per Residential Unit |
|-----------------------------|----------------------|
| Law Enforcement Allotment   | \$ 104               |
| Administration Allotment    | \$ 350               |
| <b>Total Other Revenues</b> | <b>\$ 454</b>        |

Source: See Appendix General Fund Line Item Revenue Projections

**NOTE: THESE FIGURES DO NOT INCLUDE ITEMS NOT DIRECTLY ATTRIBUTABLE TO NEW DEVELOPMENT SUCH AS PILT FUNDS.**

## Total Revenues 2015

### TOTAL REVENUES 2015

The total estimated revenue in 2015 can be discerned by calculating the total number of new residents and further estimating the number of new units those new residents will require.

Figure. 41. 2015 Total New Revenue

| 2015 Revenues         | 2015  | Estimated Units | Estimated Revenue from New Units |
|-----------------------|-------|-----------------|----------------------------------|
| Project New Residents | 1,734 | 731.7           | \$ 649,003                       |

The 2015 projections are based on an RPI projections and represent future growth based on the average known growth observed over the last ten years in Ouray County.

## General Fund Cost/Benefit

RPI reports that the annual general fund cost of maintaining the current LOS is about \$320,000 per thousand new residents: the revenue projected from these new residents is estimated at \$288,000 for an operations shortfall of about \$32,00 or 10%. This shortfall does not manifest itself as an actual budget dollar shortfall. Rather, it represents the gap between what it costs to serve new residents and what they are expected to generate in revenue.

This mismatch is may be obscured by tourist expenditures and resultant sales tax revenue; however, budget projections include certain grants that may or may not be available in the future.

Because few if any funds are earmarked for capital improvements, there are significant capital shortfalls that are likely to lead to continuing degradation of LOS.

Figure 42. General Fund Annual Operations Costs & Revenues

|                     | Total Annual Expenditures<br>(on new residents) | Total Annual Revenues<br>(from new residents) | Shortfall    |
|---------------------|-------------------------------------------------|-----------------------------------------------|--------------|
| Operations          |                                                 |                                               |              |
| Per 1,000 Residents | \$ 320,628                                      | \$ 288,186                                    | \$ (32,442)  |
| Capital             |                                                 |                                               |              |
| Per 1,000 Residents | \$ 712,102                                      | \$ 32,177                                     | \$ (679,924) |
| TOTAL               | \$ 1,032,729                                    | \$ 320,363                                    | \$ (712,366) |

RPI projects law enforcement costs and revenues based on the projected 1734 new residents in 2015, will generate total expenditures of \$261,989 and develop revenue of \$153,233 resulting in a shortfall of \$108,756.

### **RPI Conclusions**

Because of state tax laws, there is a chronic shortfall between costs and revenues generated by residential units.

Commercial development subsidizes residential development. This emphasizes the need for supporting healthy commercial development in the municipalities. If residential commercial development falls out of balance, it could pose significant challenges to the budget.

Revenues need to be developed for capital facilities investment. Impact fees are appropriate for assessing new development for its fair share of this cost. However, impact fees are subject to limitations of state law. An impact fee support study can address these limitations.

The projected general fund revenues fall short of meeting the annual operations cost of maintaining current LOS for administration by about 10%. Without other funding sources or a change in direction of the general trends, it is likely there will be a slow decline in the LOS for general fund departments.

Encourage policies to promote higher density development near existing infrastructure while keeping rural landscapes intact.

## Appendix A

### **Methodology**

#### 1. Demand Unit Measurement and Projection to 2015

Demand units are the units of growth generating additional demand for services. For example, housing units are used for calculating increased demand on schools. Population increases are used for calculating increased demand on police services.

#### 2. Proportionate Share

Fiscal impact analyses assign the cost of development to specific land uses. This requires a determination of what proportions the residential and non-residential portions of the projected growth will cost various departments, districts, and subtraction of costs that are not directly related to the development. Projection of increased demand for a given department requires a known proportion of how that department delivers its services to different land uses as well as to areas unrelated to land use such as highways. For example the Sheriff may respond to a call from a business, a residence or the highway. Knowing the proportion of calls the Sheriff makes generates the proportionate share.

#### 3. Calculating Level of Service

LOS calculations are dependent on having the current demand units for a department or district and the proportionate share. LOS is defined as the amount of resources (employees, funding, sq. ft., etc.) per demand unit and is expressed both in terms of day-to-day operations and maintenance and in terms of capital facilities. After the proportionate share has been applied to the resources, LOS can be expressed as a cost per demand unit. This is the fundamental measure of the incremental cost of growth.

### **Revenue Projections and Fiscal Summary**

Revenue analyses are specific to the source of revenue. In order to isolate the revenues generated specifically by residential units and their occupants the budget was sorted to include only revenues that are directly related to new housing units. Non-residential development in the unincorporated county was considered to be relatively minor and not all calculations and costs apply to this demand unit.

### **Existing Conditions and Projected Growth**

[Many of these projections are based on Colorado Demography Section forecasts and modified by RPI to reflect known 10-year growth trends – RPI forecasts tend to be higher than Demography Section forecasts.]

## Appendix B

### **County General Fund Departments**

#### **Administration**

County Administrator  
Commissioner's Office  
Land Use Department  
County Clerk/Elections  
Assessor  
Coroner  
County Attorney  
Public Trustee  
Facilities management  
Information Technology  
Sheriff's Department