Introduction

We analyze the relative cost of providing community services to agricultural lands versus rural residential development across the state of Colorado. This report summarizes the statistical analysis of school revenues and school expenditures, in addition to total county revenues and expenditures for Colorado counties, using the best available county level statewide sources of secondary data.

The American Farmland Trust (AFT) reports:

- Residential development requires $1.15 in community services for every $1 of tax revenues it contributes.
- Farm and forest land uses require $0.35 in services for every $1 of tax revenue generated, and
- Commercial or industrial uses demand even less ($0.27: $1) relative to their contribution.

The USDA reports:

- Residential development requires $1.24 in community services for every $1 of tax revenue generated,
- Agriculture demands $0.38 in services per $1 of tax revenue contributed.

In sum, commercial, industrial, agricultural and forest uses of lands pay for themselves from a public policy perspective and residential development, on average, is a net drain on county coffers.

Results

Our results of our statistical estimates suggest the following:

1. A 1% increase in average rural personal income is associated with a 0.19% increase in county revenues and a 0.41% increase in county expenditures.
2. A 1% increase in total county assessed value implies a 0.52% increase in county revenues, while a 1% increase in county government employment implies a 0.32% increase in county expenditures.
3. Crop and rangelands contributions to Colorado county revenues are greater than to expenditures.

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4. A 1% increase in county total assessed valuation is associated with a 0.53% increase in school revenues and a 0.58% increase in school expenditures.

5. A 1% increase in rural population is associated with a 0.054% increase in school revenues and a 0.056% increase in school expenditures.

6. Urban population and acres of agricultural land positively influence Colorado school district budgets.

7. Dispersed rural residential development in Colorado costs county government and schools $1.65 in expenditures for every dollar of new revenue received.

8. 62 of 63 Colorado counties show a negative net fiscal impact of dispersed rural residential development (Figure 1).

Conclusions

Higher intensity land uses commonly require more government services and generate greater tax income than lower intensity uses on a per acre basis. The basic question facing community government leaders is whether a proposed land use generates more or less tax revenue than it demands in services.

This research suggests that rural residential development in the aggregate is a net fiscal loss to county governments. What these results suggest though is that the character and type of development should be studied before one can say that a particular development is itself a net fiscal loss.

Both the school district and county budget results suggest that the type of rural residential development may affect the fiscal impact to the county. Development distance from public service nodes, the composition of the in-migrating households, the density of development and the natural resource land base all may be important factors to integrate into a fiscal impact model. Such data should be obtained and analyzed in order to assist county officials with planning strategies.

Importantly, these estimates do not include the broad array of other public good values associated with agricultural land, which includes wildlife habitat, water quality, and viewsheds. Thus this fiscal value estimate is a conservative measure of the cost and benefit disparity resulting from dispersed rural residential development.
Figure 1  Estimated net cost of converting 35 agricultural acres to one county average household, ratio of services demanded to tax revenues generated ($).