

USING FISCAL IMPACT ASSESSMENT TO IDENTIFY SOCIAL AND GEOGRAPHIC INEQUITIES



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PROBLEM STATEMENT

Despite the high costs of repairing existing roads and infrastructure, many communities continue to invest in new roads as they spread across the landscape.

Consequently, most communities are facing serious budget predicaments that limit their ability to simply maintain, let alone improve, existing roads and infrastructure.

PURPOSE

This research used fiscal impact assessment to evaluate the costs of maintaining existing roads and infrastructure and the amount of revenue (i.e. property taxes) generated from property investments in Brookings, SD.

The purpose of this analysis was threefold:

1. Perform cost-benefit analysis of the average cost of servicing each parcel compared to the tax revenue it generated.
2. Identify those residential parcels that are more “efficient”.
3. Examine the spatial distributions of relative “winners” and “losers”.

DATA & STUDY AREA

Two datasets were required for this analysis: (1) a cadastral map; and, (2) tax rolls.

Analysis was limited to residential properties located within the study area.

The study area was the City of Brookings, South Dakota.



METHODS

Tax roll data were spatially joined with parcels.

Residential area was computed as a percent share of the total area.

$$\% \text{ Residential} = (\text{Res. Area} \div \text{Total Area})$$

Municipal costs were divided across residential properties, based on % share of total area.

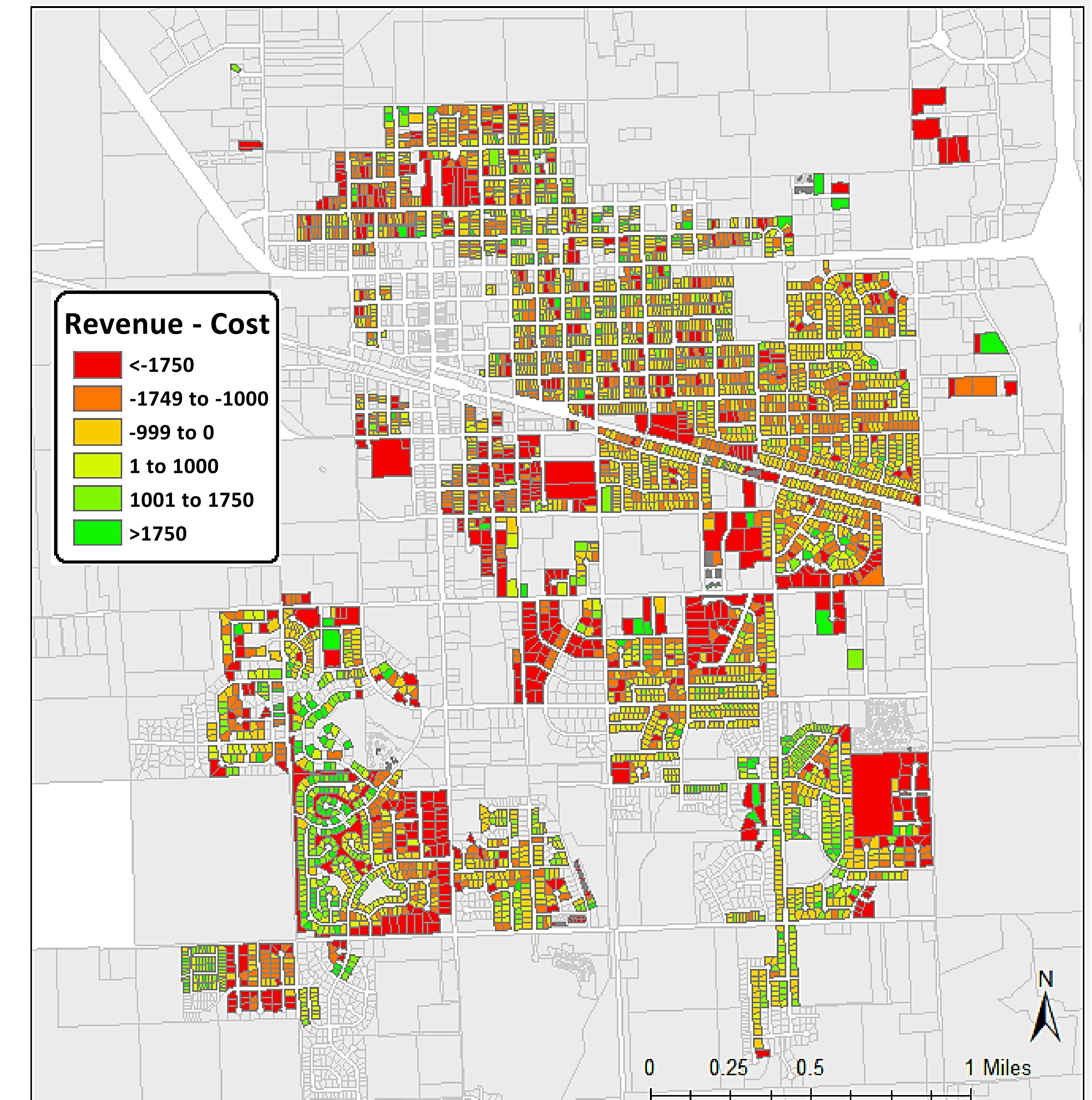
The area of each residential parcel was divided by the total residential area.

$$\% \text{ Area} = (\text{Parcel Area} \div \text{Total Res. Area})$$

Residential costs were divided across parcels based on % share of the total residential area.

Finally, property tax revenues were subtracted from each residential parcel’s share of costs.

RESULTS



DISCUSSION

Results suggest a tendency for modest-income households to subsidize many higher-income households.

Result also point toward the importance of residential density (lot size) in causing these inequities and creating more efficient cities.

Fiscal impact assessment should be more widely used to inform neighbourhood design.