



## Impact of DEED's Small Cities Development Program January 2003

### **Executive Summary**

Below is an overview of the results of research on the impact of the Minnesota Department of Employment and Economic Development's Small Cities Development Program (SCDP). More information is included in the "Results" section of this report.

- Cities that had SCDP projects awarded between 1995 and 1999 had higher property value growth rates between 1995 and 2001 than similar cities that did not have SCDP projects. Two forms of statistical analysis, difference-of-means testing and regression analysis, support this conclusion.
- According to these two forms of statistical analysis, SCDP users had a 5.2 to 5.9 percent greater increase in property values than SCDP non-users. This difference, at least partially attributable to SCDP participation, is statistically significant.
- The difference in property value growth rates means that the average SCDP participant city was able to create approximately \$2.6 to \$3.0 million in additional property value between 1995 and 2001, above-and-beyond the normal increase. However, results varied for individual cities.
- Overall, this results in an estimated total property value increase of \$333 million to \$384 million from the 128 SCDP projects studied, above-and-beyond the normal increase.

### **Overview of Small Cities Development Program**

The Small Cities Development Program (SCDP) provides federal grants from the U.S. Department of Housing and Urban Development (HUD) to local units of government on a competitive basis for a variety of community development projects. These projects are intended to provide decent housing, a suitable living environment and expanding economic opportunities, principally for persons of low-and-moderate income.

Because of the provision that projects improve the conditions for persons of low-and-moderate income, SCDP projects often invest in areas that private-sector developers may not. However, private developers often invest in projects that build on the improvements created by the SCDP projects.

## Results

Two statistical tools, difference-of-means testing and regression analysis, provide evidence that communities that had SCDP projects had higher property value growth rates than similar communities that did not have SCDP projects. These tools provide evidence that SCDP projects had positive impacts on property values in the communities in which the projects occurred. SCDP projects also typically leveraged other private-sector investments in low-and-moderate income areas. Because of the ability to target such leveraged investment into cities and communities with the greatest need, SCDP appears to have contributed more to the tax base of affected communities than the cost of the program.

### *Creation of Matched Pairs*

In order to discover the impact that SCDP has on communities, this analysis examined how communities that used the program compared to similar communities that did not use the program. It studied 128 of 132 completed SCDP grants that were awarded in Fiscal Years 1995 through 1999. The remaining 4 projects were not studied because data was not available for those communities. The 128 SCDP “users” were matched with a city with similar characteristics, such as level and growth of population and level and growth of median household income.

As a measure of the quality of the matched pairs, statistical testing did not provide any evidence that these two groups differed from each other for the following city-level variables: population growth, median household income and median household income growth.<sup>1</sup> Testing on city-level population level variables (population in 1990 and population in 2000) revealed that the average population of SCDP users was slightly higher than the average population of non-users. However, this result is unlikely to influence the results substantially, as the regression analysis presented below indicates that the population level is inversely related (if one goes up, the other goes down) with property value growth rates. As a result, users would be less likely to have higher property value growth rates than non-users, based on higher population alone. Overall, the evidence indicates that the pairs appear to be reasonable matches. These matched pairs provided the unit of analysis for research.

### *Difference-of-Means Testing on Matched Pairs*

The key variable for the analysis was the total property value growth rate in each community between 1995 and 2001. The group of SCDP users was compared to the group of non-users. Statistical testing was used to determine if users had higher property value growth rates than non-users. In fact, property values grew 59.5 percent for users, compared to 54.3 percent for non-users, a difference of 5.2 percentage points. The difference in growth rates is statistically significant, providing evidence that users had higher growth rates in total property values than non-users between 1995 and 2001.<sup>2</sup> In other words, participation in SCDP projects appears to be related to increased property value growth rates above-and-beyond what would have occurred in absence of the SCDP project.

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<sup>1</sup> Using a Paired-Samples T Test and 90 percent confidence.

<sup>2</sup> Using a Paired-Samples T Test at 90 percent confidence.

## *Regression Analysis*

Regression analysis was also used to determine if SCDP participation was a statistically significant determinant of property value growth rates in the communities studied. Total property value growth rates for users and non-users were estimated as a function of the following variables: population in 2000, the population growth rate between 1990 and 2000, median household income in 1999, median household income growth between 1989 and 1999, and participation in SCDP.<sup>3</sup> Statistical testing on the overall significance of the regression equation found that the equation as a whole was statistically significant, indicating a good fit for explaining variability of property value growth rates.<sup>4</sup>

Of the variables included in the regression, the following variables were statistically significant: population in 2000 (decreases property value growth rates), the population growth rate between 1990 and 2000 (increases property value growth rates), median household income in 1999 (increases property value growth rates), and participation in SCDP (increases property value growth rates).<sup>5</sup> Of primary interest in this report, SCDP participation is estimated to increase total property values approximately 5.9 percent higher than non-participation, similar to the 5.2 percent estimated by difference-of-means testing. Therefore, regression analysis provides additional evidence that SCDP users had statistically significantly higher growth rates in total property values than non-users between 1995 and 2001.

## *Program Impact Estimates*

The above results can be used to estimate how much impact SCDP projects had on property values in cities with SCDP projects. The average SCDP user had total property value of approximately \$50 million in 1995. The average amount difference between SCDP users and non-users was estimated to be 5.2 percent for difference-of-means testing and 5.9 percent for regression analysis. This amount can be considered the incremental benefit of SCDP participation, in terms of increased total property value between 1995 and 2001. For the average SCDP user, this would translate into \$2.6 million to \$3.0 million in additional property value, in excess of the increase generated if the community grew at the same pace as non-users. However, results varied for individual cities, based on project timing and other factors. For 128 projects studied during the five-year period (awarded in 1995 through 1999), there would be \$333 million to \$384 million total in additional property value created.

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<sup>3</sup> Using a method called a dummy variable, in which non-participants are assigned a value of “0” and participants are assigned a value of “1.”

<sup>4</sup> Using the F statistic at 90 percent confidence.

<sup>5</sup> At 90 percent confidence.

## **Limitations**

This analysis is an important initial step that takes a high-level and useful view of the impact of SCDP grants. Although the analysis might benefit from further refinement in order to increase its sophistication, such an effort would require investment of substantial resources.

The impact estimates are statistically significant, meaning that SCDP participants were statistically different than non-participants. By creating matched pairs of cities, the intention is to create similar circumstances for each matched pair in order to reduce variability due to other reasons. As a result, the findings are strong evidence of SCDP's economic impact, but should not be considered a certainty. Property value growth rates are affected by many factors, such as population, income growth, and possibly participation in SCDP projects. Typically, SCDP projects encourage other development activities in project communities. An important feature of SCDP projects is fueling and directing investment into targeted cities. These activities, while related to SCDP projects, may have occurred in one community or another regardless. Therefore, SCDP participation alone cannot be viewed as the exclusive cause of higher property value growth rates.