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# The Impact of Transit-Oriented Development on Social Capital Robert B. Noland, Ph.D., Orin T. Puniello, M.P.P., and Stephanie DiPetrillo

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Transit-oriented development (TOD), the clustering of new, more intensive development near transit stations, has many advantages. While TODs

More dispersed land use patterns may be preferable if social capital is an objective.

can lead to increased public transit use, some have argued that wider community benefits can accrue. These benefits include "social capital," defined as greater civic engagement among residents and connections with neighbors and others in the community. The antithesis is that more sprawling, less compact, communities result in social isolation. This research investigates whether various measures of social capital are associated with living in or near TODs.

#### **Study Methods**

Data was collected around eight rail stations in New Jersey, which were selected in consultation with NJ Transit staff and included a mix of different socio-economic levels. The sampling area covered up to two miles from the station, with a stratification of those living in new developments, within ½ mile, and further out. A mail push-to-web protocol was used to distribute questionnaires; each potential respondent received an initial mailing directing them to fill out an online questionnaire. Additional mail contact encouraged respondents to complete the questionnaire. Final followup included a paper copy to be mailed back. An initial sample of 8000 (1000 per station area) resulted in 1629 responses. Stations are listed in Table 1; locations are shown in Figure 1.

The survey included a small subset of social capital questions adapted from other surveys (see Table 2). The question on volunteering was a binary yes/no question, while the others were measured on a five-point Likert scale from "strongly agree" to "strongly disagree". Each question was modeled independently, and a unified index was also created to capture the full range of responses. The survey included a range of questions on travel behaviors, attitudes, and activities that respondents engage in within the TOD area. The investigators also used socioeconomic data from the Census. Multivariate models were estimated using both logit and ordered logit techniques.

#### **Findings**

Overall the models show mixed evidence of improved social capital for people living closer to stations (i.e., in TOD areas). The strongest result is that living in a station area leads to agreement that one's community is a good place to live and that there is a greater sense of community. Some other TOD-related variables, however, are not associated with greater social capital. A consistent finding in the models is that higher employment density is associated with less social capital and higher population density has no association with social capital. Specifically, the model estimates find that employment density is negatively associated with a community being perceived as a good place to raise children. Detached single-family housing, which is a less frequent housing form in TOD areas, is also associated with higher levels of social capital.

A limitation of this analysis is the diversity of areas surveyed. While the intent was to include lowerand higher-income areas, this may have led to some difficulty in estimating effects. The investigators' strongest results, however, are relatively robust across models, in particular for employment density and housing type. Another limitation is that the survey did not include a full set of social capital variables, as the survey was fielded to study a number of other TOD issues. A broader set of questions may have captured more dimensions of social capital.

#### **Social Capital Survey Questions**

Have you volunteered your time for a neighborhood project or organization? (Yes/No)

Please tell us how much you agree or disagree with the following statements. [Measured on a Likert scale from strongly agree to strongly disagree]

- · My neighborhood is a good place to live
- · Living in my neighborhood gives me a sense of community
- I know my neighbors
- · Most people in my neighborhood can be trusted

# **Policy Recommendations**

For planners the study results suggest that TOD is not a panacea for increasing social capital. In particular, focusing on employment density may be associated with reductions in social capital. Those living in detached single-family housing report greater levels of social capital, suggesting that more dispersed land use patterns may be preferable if social capital is an objective. It is possible to design TOD areas with single-family detached homes, however, so it may be that moderately high population density levels are sufficient.

Results suggest that urban form and land-use patterns may not be positive elements. There is evidence that providing access to good alternative travel options can enhance social capital, although this is not strictly linked to transit-station proximity. It may be beneficial to provide the ability to commute without a car – and perhaps the opportunity to avoid the stress and uncertainty of congested travel – so as to foster social capital in communities.

Planners seek to increase social capital, because it has been found to support the health and happiness of citizens, reduce crime, enhance governance, and improve economies. It is thus necessary to continue to test and research different ways of fostering social capital.

# About the Authors

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# To Learn More

For more details about the study, download the full report at transweb.sjsu.edu/project/1252.html

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