MOUNTAIN-PLAINS CONSORTIUM

RESEARCH BRIEF | MPC 17-330 (project 485) | September 2017

A Framework for Assessing Feasibility of Transit-Oriented Development (TOD) Project Sites

the ISSUE

This research answers the question: How can a transit agency choose among alternative TOD locations within a transit network? The ultimate objective of the research is to develop a decision support framework which can be used by transit agencies when choosing TOD site by incorporating their unique factors and weights.

the RESEARCH

This research included a comprehensive literature review to get an initial list of factors, interviews to vet those factors, and the use of a multi-criteria decision-making tool entitled Analytic Hierarchy process (AHP) to determine their weights. A list of factors was compiled based on the literature review which was vetted by Transit-Oriented Development experts to create a final list of factors of success. These factors were then sent back to experts for determining their weights using the AHP methodology. The framework was tested in two different transit agencies as case studies, the Regional Transportation District (RTD), Denver and the Roaring Fork Transportation Authority (RFTA), Aspen.

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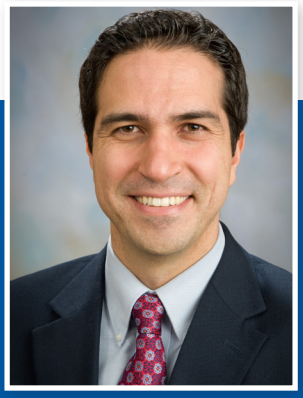

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Project Title

A Framework for Assessing Feasibility of Transit-Oriented Development (TOD) Project Sites

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the FINDINGS

This framework is flexible for transit agencies to add or delete factors and identify the importance/weight for each factor based on their unique objectives stemming from their own TOD planning priorities and localized purposes. The implementation examples of this framework showed differences in results when it comes to assigning weights of importance to TOD decision-making success factors for an urban and rural transit agency. Since TOD decisions represent a large and irreversible commitment of resources, rigorous and structured evaluation of success factors and alternatives as presented herein provides great benefit to decision makers.

the IMPACT

TOD is an important issue that is likely to attract interest of researchers and transit professionals in the future. With many developing countries showing interest in the implementation of TOD projects, TOD concept will continue to develop unique research questions and applications and TOD will play a significant role in the field of transportation research for many years to come. Given this, this study is original and timely in providing the transit agencies with a practical and ready to implement decision support framework they can use when choosing a TOD site to develop/build.

For more information on this project, download the entire report at http://www.ugpti.org/resources/reports/details.php?id=884

For more information or additional copies, visit the Web site at www.mountain-plains.org, call (701) 231-7767 or write to Mountain-Plains Consortium, Upper Great Plains Transportation Institute, North Dakota State University, Dept. 2880, PO Box 6050, Fargo, ND 58108-6050.