

In Partial Fulfillment of the Requirements for the Degree of

## Master of Arts Leonard Machler

Will defend his thesis

## **Envisioning a Sustainable State of Transportation Accessibility in a Central Phoenix Neighborhood**

## Abstract

The numerous challenges to sustainability posed by the automobile-based mobility paradigm have led the researcher to advocate for a transition toward a more accessible society. An accessible community is characterized by greater walkability and a reduced need for mobility and is accomplished by bringing spatially disjointed services and activities closer to neighborhoods in which people reside. The complex system dynamics of both mobility and accessibility regimes, as well as the highly contextual requirements of local access needs, led the researcher to select the Sustainability Solution Space (SSP) framework to collaboratively envision a sustainable state of transportation access with residents from the Sky Harbor neighborhood in central Phoenix. Indicators were collaboratively defined and assigned target threshold levels with the help of stakeholders; these indicator thresholds were then analyzed for consistency and an SSP was generated. The SSP defined the future state of transportation access in the Sky Harbor neighborhood in which the largest possible range of actions could be taken without compromising the integrity of the overall system.

May 20, 2010 10:00 a.m. GIOS 481

Faculty, students, and the general public are invited.

Supervisory Committee: Aaron Golub, (Co-chair) Arnim Wiek, (Co-chair) Christopher Boone, (Member)