Transportation systems exist to improve individual accessibility. However, emerging applications of geographical information systems (GIS) in transportation and intelligent transportation systems focus on throughput -- the amount of system flow -- rather than accessibility.Sensitive transportation planning requires rigorous, realistic and tractable accessibility measures. This talk will report on the development of GIS tools for measuring space-time accessibility. Using Hägerstrand time geography as a basic foundation, the talk will describe various space-time prism-based accessibility measures and their implementation within a GIS environment. The resulting tools generate realistic depictions of geographical variations in individual accessibility, particularly with respect to the transportation network.

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