



Memorandum

To: Garner Stall

Date: February 16, 2010

From: David Rouse
Andrew Dobshinsky

Ref. No. 06035.01

Project: Austin Comprehensive Plan

Pages:

Re: Susceptibility to Change

CC:

Susceptibility to Change is used to broadly indicate the likelihood that an area will change in the near future. Change can include new development on previously undeveloped land, redevelopment, change of use, or intensification of use.

The draft Susceptibility to Change map was created using a GIS overlay analysis of eleven factors.

- owner occupancy
- land status
- improvement to land ratio
- zoning and overlay districts
- projected growth in employment
- water service
- transit corridors
- road access
- property violations
- year built
- development cases

The study area was divided into 10-acre grid cells. For each factor, every cell received a normalized value between 0 and 1, with 0 being the least susceptible to change and 1 being the most susceptible to change. For each cell, all factors were then added together with equal weights to produce a final susceptibility score. On the final map, the susceptibility scores were divided using natural breaks into 3 categories: areas most susceptible to change, areas moderately susceptible to change, and areas least susceptible to change.

A description of each factor is described on the following pages.



Owner Occupancy

Most susceptible	1	not owner-occupied or not residential
Least susceptible	0	owner-occupied residence

Owner occupancy is based on the homestead exemption flag in Austin's land database.

Land Status

Most susceptible	1	undeveloped, no constraints
	0.67	developed, no constraints
	0.33	undeveloped, constraints
Least susceptible	0	developed, constraints

Improvement to Land Ratio

Most susceptible	1	ILR > 1.5
Least susceptible	0	ILR = 0, or non-commercial property

All possible values in-between

Example 0.67 ILR = 1

Explanation of Improvement to Land Ratio from the Community Inventory:

Improvement to Land Ratio (ILR) is the appraised value of an improvement divided by the value of its land. The theory is that land owners will seek to maximize their investment in the land by developing or redeveloping when the value of the improvement is less than the land.



Zoning and Overlay Districts

Most susceptible	1	areas in vertical mixed use, mixed use, planned unit development, transit-oriented development, or North Burnet/Gateway districts; areas in North Burnet/Gateway, transit-oriented development, university, urban renewal, or central urban redevelopment overlay districts; and areas with high-density mixed use, major planned development, mixed use, mixed use/office, neighborhood mixed use, or transit-oriented development future land use designations
	0.5	not in any of the above or below districts
Least susceptible	0	areas in historic or neighborhood conservation combining districts

Projected Growth in Employment

Most susceptible	1	greatest growth in employment density (jobs / acre)
Least susceptible	0	least growth in employment density (jobs/acre)

All possible values in-between

Water Service

Most susceptible	1	areas currently served by water mains
	0.75	retail water area served 2009
	0.5	impact fee service area boundary
	0.25	outside impact fee service area, in desired development zone
Least susceptible	0	outside all areas above



Transit Corridors

Most susceptible	1	areas closest to most transit corridors (well served by transit)
Least susceptible	0	areas outside all transit corridors (not well served by transit)

All values in-between

This layer is the result of a sub-overlay analysis that combined transit corridors. For each of the following transit corridors, a cell was given a value equal to its distance from the corridor. Distance values given up to a half mile away for CapMetro Red Line and rapid bus routes, Austin-San Antonio Commuter Rail corridor, and MoKan corridor. Distance values given up to a quarter mile away for Core Transit Corridors, express and local bus routes.

Road Access

Most susceptible	1	areas with greatest density of arterial roadways (best road access)
Least susceptible	0	areas with least density of arterial roadways (worst road access)

All values in-between

The road network included in this analysis combines existing roadways with those proposed in the 2025 Austin Metropolitan Area Transportation Plan.

Property Violations

Most susceptible	1	most property violations
Least susceptible	0	no property violations

All values in-between



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Year Built

Most susceptible	1	built in or before 1900 or undeveloped
Least susceptible	0	built in 2000 or later

All values in-between

Example 0.19 built in 1981

Development Cases

Most susceptible	1	areas with development cases
Least susceptible	0	areas without development cases or developed