

Proposed Measures

INTERCHANGE AREA MANAGEMENT PLAN I-5: Fern Valley Interchange

INTRODUCTION

The purpose of the three zones – Conditional Use, Overlay and Trip Budget – is to build a tool to manage the interchange. This is necessary to ensure its long-term usefulness, while preserving the ability to develop to the greatest extent feasible.

The area covered by each zone is the same: property within the city limits, east of Bear Creek.

CONDITIONAL USE OVERLAY ZONE

The Conditional Use Zone places a limit on the number of trips a property can generate without requiring a conditional use permit, which would require the property owner to complete a Traffic Impact Analysis (TIA). The TIA determines how the road network and intersections would be impacted by development. Based on the TIA's results, the property owner, the City of Phoenix and ODOT would agree on mitigation. Further mitigation related to city ordinances could be negotiated between the property owner and the City of Phoenix.

The limit would likely be around 25 pm peak hour trips per acre – see attached Table.

OVERLAY ZONE

The Overlay Zone prohibits uses beyond a certain limit. Here, the limit would likely be around 20 or 30 pm peak hour trips per acre.

TRIP BUDGET OVERLAY ZONE

The Trip Budget Zone looks at the available capacity of the intersection(s) most vulnerable to congestion (currently OR99/Fern Valley Road/E. Bolz Road, and the I-5 Southbound ramps) and compares that with the amount of current and projected traffic to determine the total amount of trips available for development.

Once the total number of available trips has been determined, a portion of the available trips are allocated to parcels based on total acreage. The remaining trips are placed in a "trip bank".

Applications proposing a use that comes in under the lot's allocated number of trips may put the remaining trips back into the trip bank for use by others, or retain the remaining trips for later use. Another alternative is to negotiate with Phoenix to relax certain ordinance requirements in exchange for putting the trips back into the trip bank.

Applications proposing a use that comes in over the lot's allocated number of trips will need to apply for a conditional use permit to withdraw from the trip bank, conduct a Traffic Impact Analysis, and provide necessary mitigation to keep transportation facilities within standards.

Since there are a finite number of trips available in the trip bank, it will be necessary at some point to look at larger transportation system improvements to increase capacity and put more trips into the bank. For example, the weakest intersection is the OR99/Fern Valley Road/E. Bolz Road. Two alternatives have been shown to improve traffic conditions: an overcrossing over I-5 and widening OR99. If either of those project should become funded, then the City of Phoenix and ODOT would reexamine traffic capacity and projected traffic conditions to increase allocation to lots or to increase the available number of trips in the bank.

TABLE 2. TRIPS, ASSESSED VALUE, AND INTERCHANGE DEVELOPMENT CHARGES PER ACRE						
Type of Land Use	PM Peak-Hour Trips Per Acre of Use¹	2007 Assessed Value Per Acre of Use (X 1,000)²	2007 Assessed Value Per Acre Per Trip	TIDC⁴ Peak Hour Trips Per 1,000 sq.ft.⁵	TIDC⁴ Peak Hour Trips Per Acre of Use⁶	TIDC⁴ Per Acre of Use
1 Nursing Home	6	\$1,200	\$200,000	NA	NA	NA
2 Mini-Warehouse	2	\$350	\$175,000	0.26	2	\$2,239
3 Continuing Care Retirement Community	12	\$1,700	\$142,000	0.17	7	\$6,822
4 Motel	20	\$2,100	\$105,000	0.47	20	\$19,341
5 Industrial Park	9	\$850	\$93,000	0.86	9	\$9,053
6 Furniture Store	9	\$650	\$72,000	0.22	4	\$4,211
7 General Office Building	20	\$1,300	\$65,000	1.49	20	\$19,250
8 General Light Industrial	12	\$550	\$46,000	0.98	12	\$11,254
9 Specialty Retail Center ³	27	\$800	\$30,000	2.66	24	\$22,911
10 Medical-Dental Office Building	9	\$250	\$28,000	3.72	33	\$32,040
11 Clinic	NA	\$1,000	NA	NA	NA	NA
Average	12	\$868	\$75,600	1.20	15	\$14,125
12 Quick Vehicle Lubrication Shop	47	\$1,500	\$32,000	NA	NA	NA
13 Automobile Care Center	30	NA	NA	NA	NA	
14 Fast-Food Restaurant w/out Drive Through	262	NA	NA	13.08	131	\$125,176
15 Home Improvement Superstore	31	\$700	\$23,000	NA	NA	NA
16 Free-Standing Discount Superstore	58	\$1,100	\$19,000	2.63	39	\$37,754
17 Discount Club	42	\$700	\$17,000	4.2	42	\$40,194
18 Fast-Food Restaurant w/ Drive-Through Window	208	\$1,350	\$16,000	17.32	104	\$99,451
19 High-Turnover Sit-down Restaurant	55	\$800	\$15,000	6.22	31	\$29,763
20 Automobile Parts Sales	60	\$600	\$10,000	NA	NA	NA
21 Pharmacy/Drugstore w/out Drive-Through Window	126	\$1,200	\$10,000	3.96	59	\$56,846
22 Athletic Club	60	\$500	\$8,000	5.76	60	\$57,879
23 Drive-in Bank	343	\$1,600	\$5,000	24.24	182	\$173,983
24 Supermarket	105	\$550	\$5,000	6.69	67	\$64,023
25 Day Care Center	72	\$200	\$3,000	4.35	24	\$22,896
26 Gasoline/Service Station with Convenience Market	241	\$550	\$2,000	5.89	15	\$14,092
Average	116	\$873	\$12,692	10.78	85	\$65,642

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Table Notes:

N/A means not available.

¹ Based on rates per peak hour on adjacent street from Institute of Transportation Engineers, Trip Generation, 7th Edition, 2003. Adjusted to rate per acre using ratios of building square footage, dwelling units, and rooms per acre from properties in Phoenix, Medford, and Talent.

² Based Jackson County property assessment records for comparable uses in Phoenix, Medford, and Talent.

³ Based on gross leasable area, which in the study area is the same as gross floor area, assuming no enclosed shopping malls.

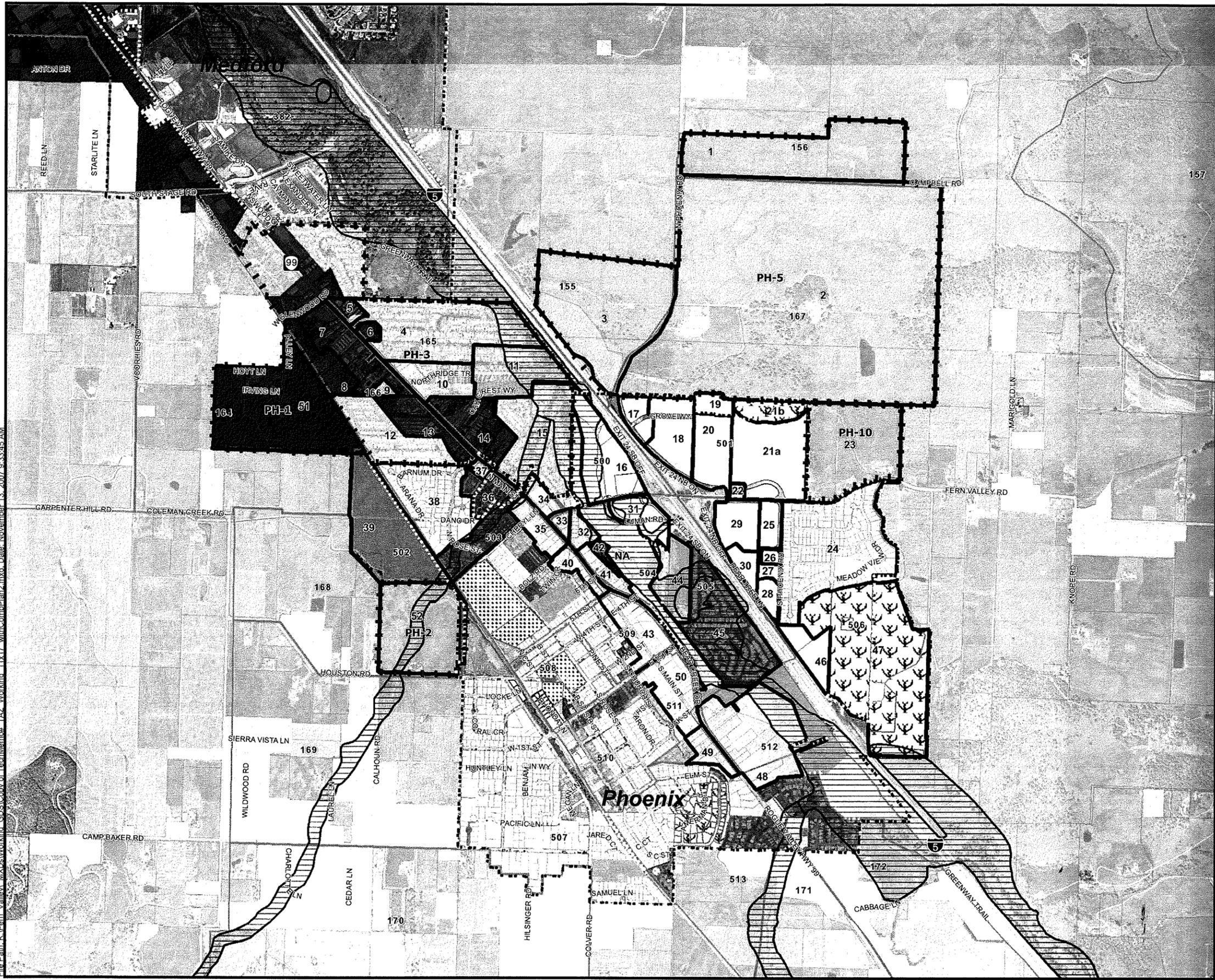
⁴ Transportation Interchange Development Charge. Amounts calculated from City of Phoenix Transportation Interchange Development Charge Calculation Sheet.

⁵ Per room for nursing homes, continuing care retirement communities, and motels; per fueling position for gasoline/service stations; and per servicing position for quick vehicle lubrication shops.

⁶ Calculated using ratios of square feet per acre from comparable properties in Phoenix, Medford, and Talent.

Source: URS Corporation

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Appendix A Development Scenario Analysis Areas

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|--|---------------------------------------|--|-----------------------|
| | Analysis Area Boundary | | City Boundary |
| | Transportation Analysis Zone Boundary | | Urban Growth Boundary |
| | Proposed Urban Reserve Area | | Taxlots |
| | FEMA 100-Year Floodplain | | |

Comprehensive Plan Designations

City of Phoenix

- Bear Creek Greenway
- City Center District
- Commerical
- High Density Residential
- Industrial
- Interchange Business
- Low Density Residential
- Medium Density Residential
- Park Open Space
- Public
- Residential Employment
- Residential Hillside
- Schools

Jackson County

- Agricultural Land
- Commercial Land
- Industrial Land
- Rural Residential Land
- Urban Residential Land

