



An Analysis of the Costs and Development Possibilities of Growth Targeted to the Southwest, Northwest and North of Ames

**Prepared by the Staff of the City of Ames and
Presented to the Ames City Council
April 1, 2008**

Objective of the Study

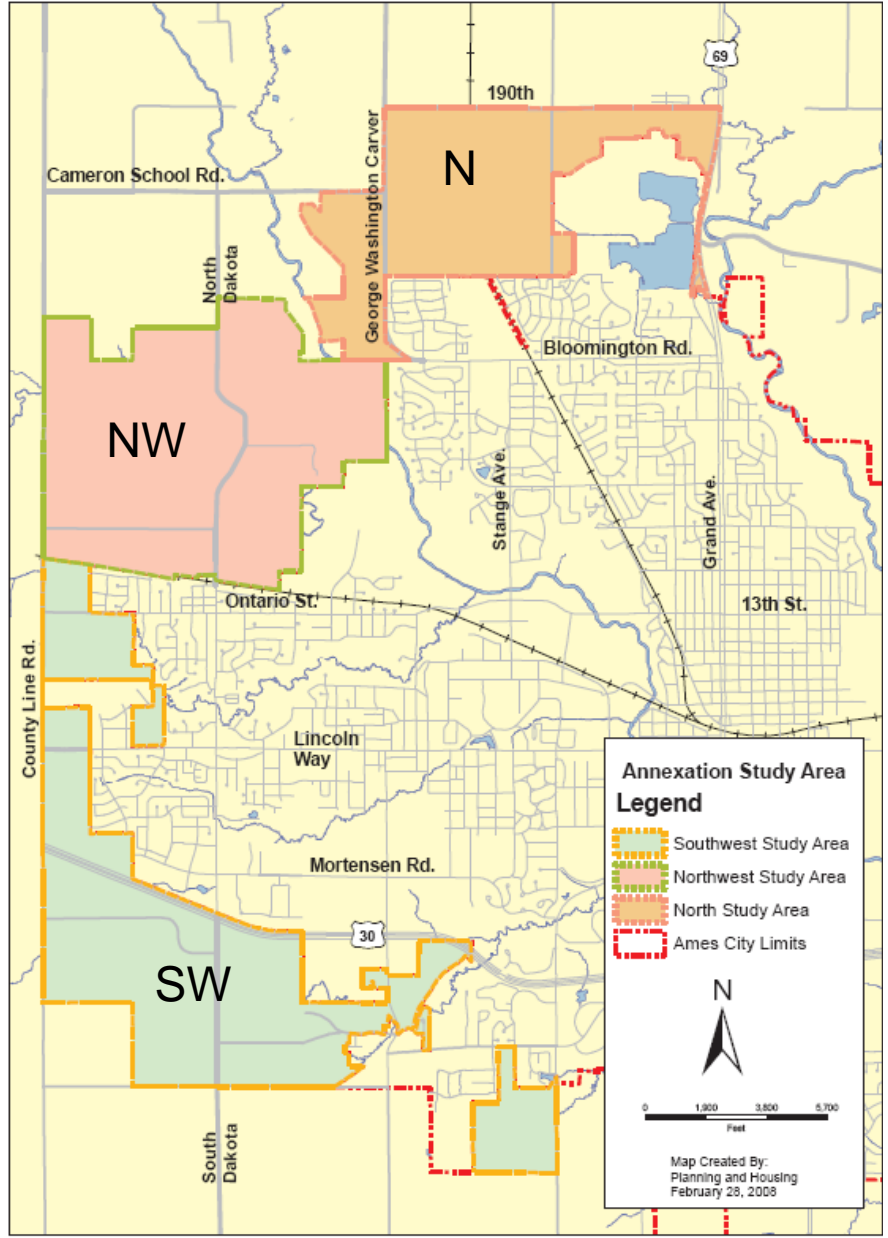
- How to meet Population Targets of the Land Use Policy Plan (LUPP)
- Southwest, Northwest, North Growth Possibilities
- Relative Costs of Annexing and Providing City Services
- Benefits in Terms of Net Developable Acres, Dwelling Units, Population

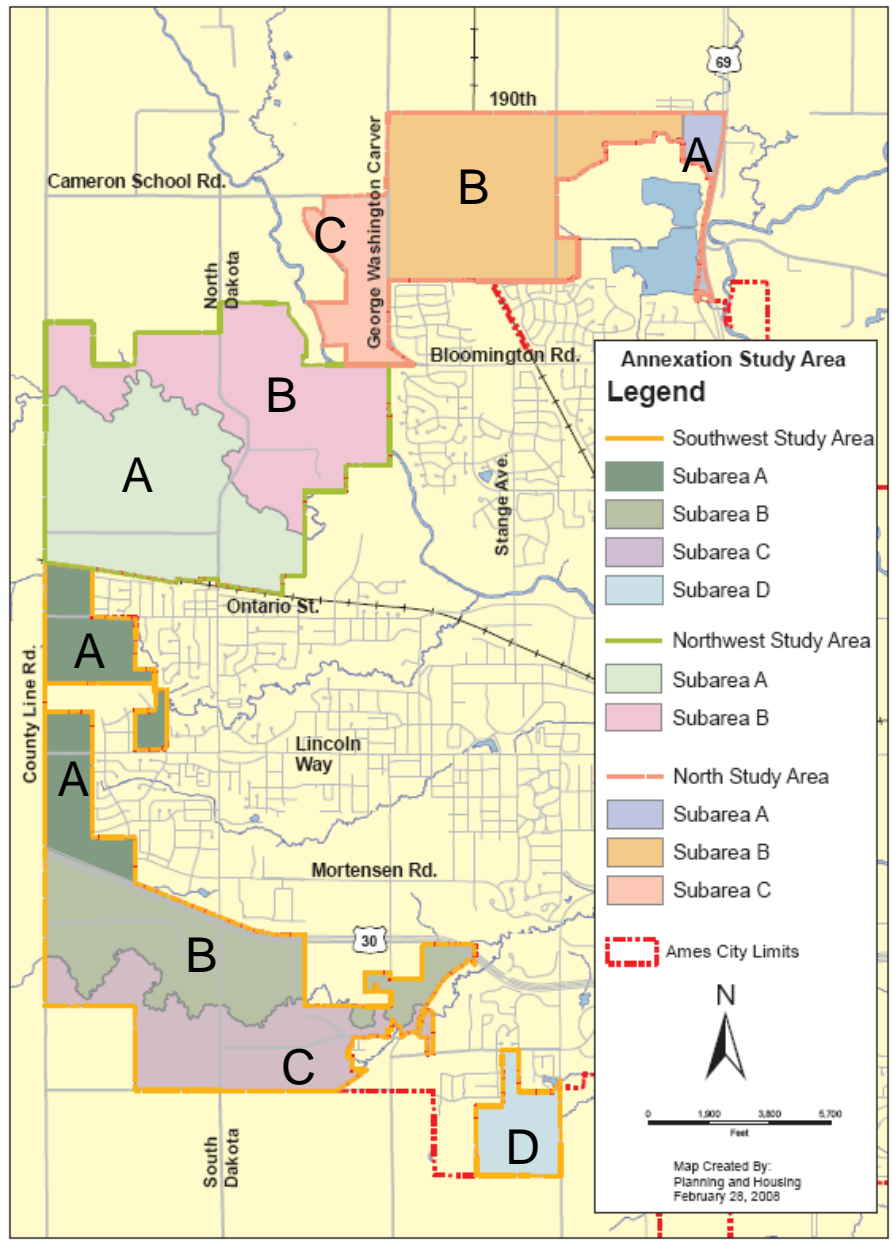


Population Targets

- 2000: Ames
50,731
- 2020: Ames and Planning Area
61,400-62,900
- 2030: Ames and Planning Area
65,000-67,000
- 2030: City of Ames
60,000-62,000



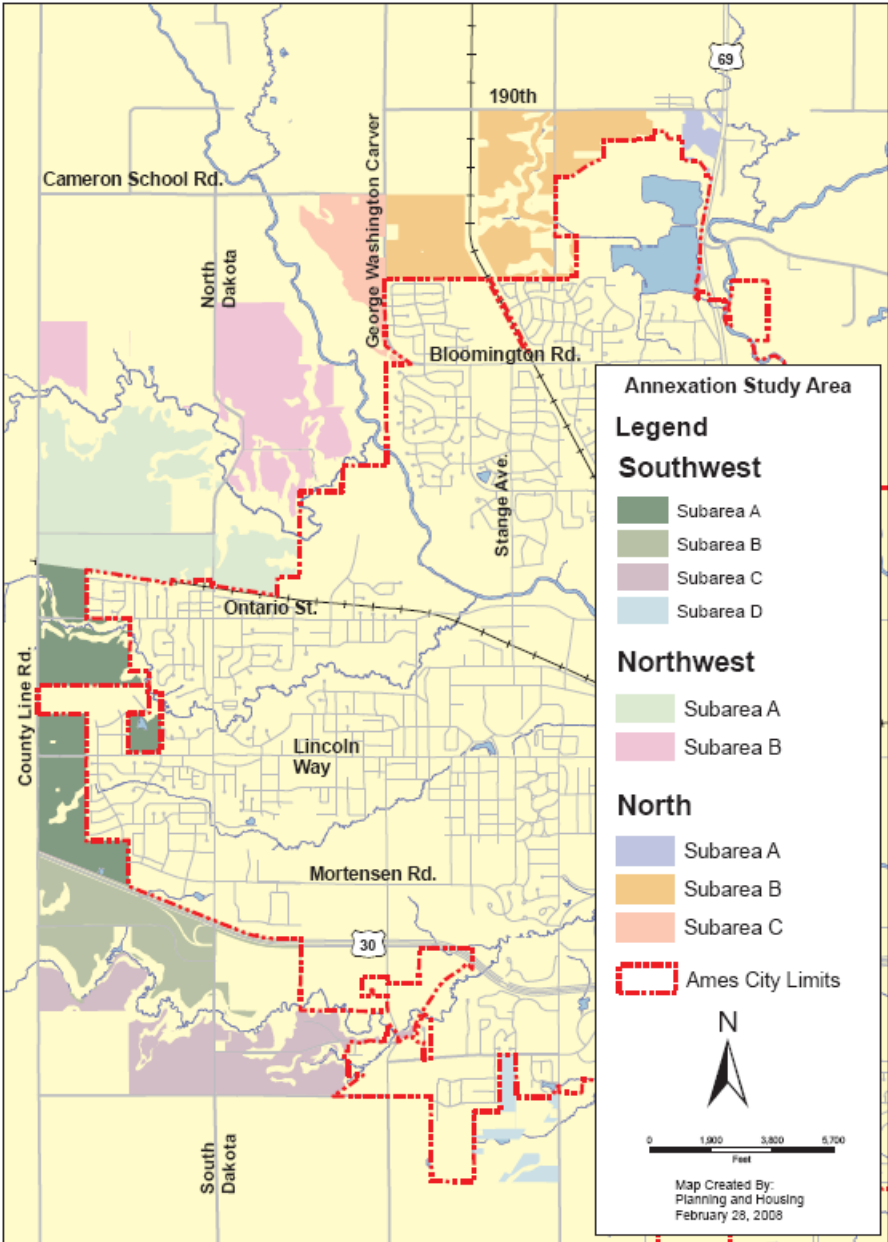




Net Developable Acres

- Southwest A...274.30
- Southwest B...224.78
- Southwest C...273.62
- Southwest D.....42.48
- **Southwest815.18**
- Northwest A...454.31
- Northwest B...327.86
- **Northwest.....782.17**
- North A.....26.10
- North B.....324.98
- North C.....114.42
- **North.....465.50**





Reaching the Population Target

- Current Population Estimate.....51,557
- Current Pop in Vacant Lots.....2,277
- Total for Southwest.....63,209
- Total for Northwest.....62,829
- Total for North.....59,187



Impacts on Ames School District

- Southwest
 - 461.58 Net Developable Acres
 - 2,308 Dwelling units
- Northwest
 - 219.57 Net Developable Acres
 - 1,098 Dwelling Units
- North
 - 1.92 Net Developable Acres
 - 10 Dwelling Units

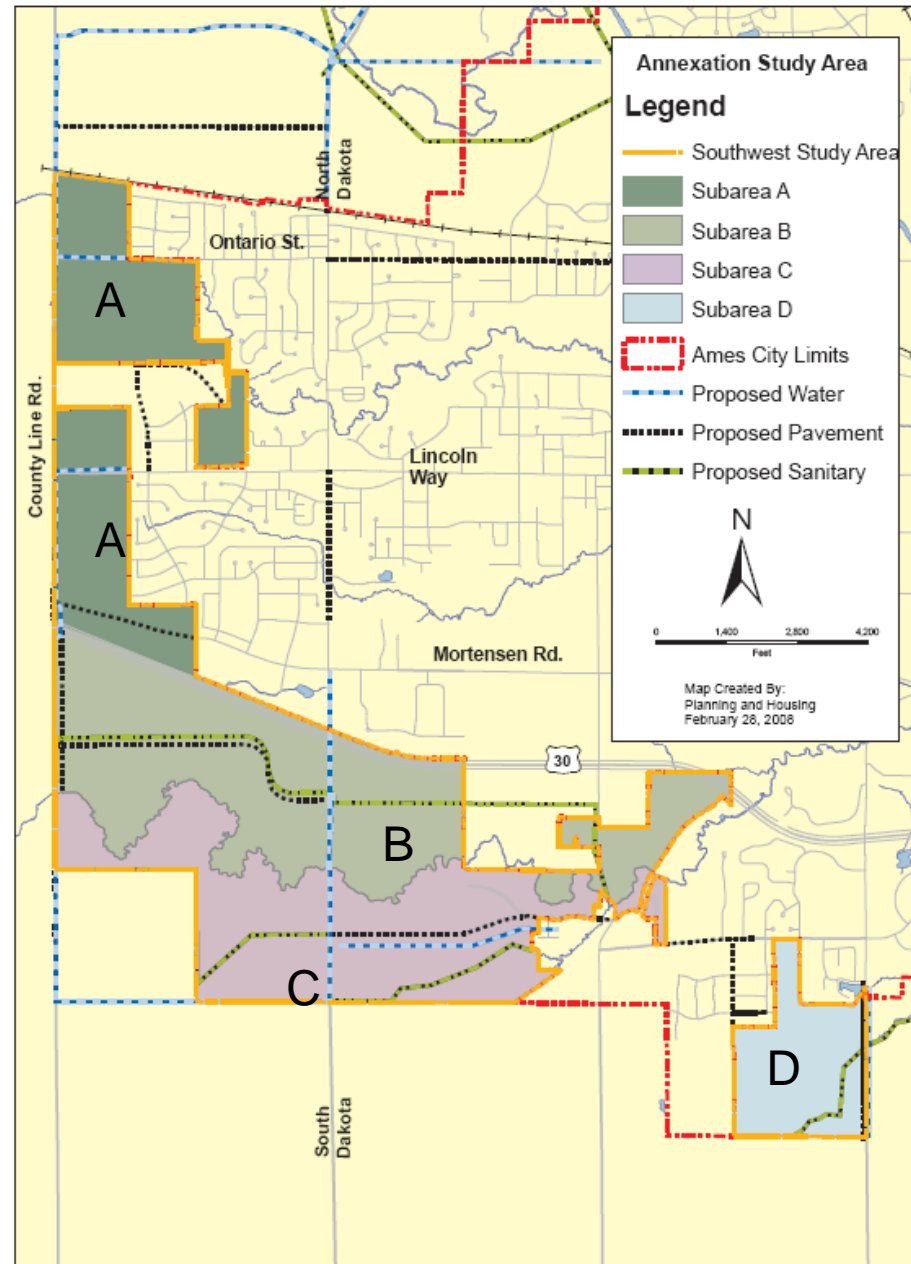


Capital Costs

- Street Improvements
- Sanitary Sewer
- Water Mains
- Total Costs and “Oversize” Costs



Southwest Study Area



Southwest Infrastructure Costs

Area A	Area B	Area C	Area D	Total
\$4,895,556	\$6,556,610	\$5,582,553	\$1,919,776	\$18,954,495
Cost per Acre				
\$17,847	\$29,169	\$20,403	\$45,192	\$23,252

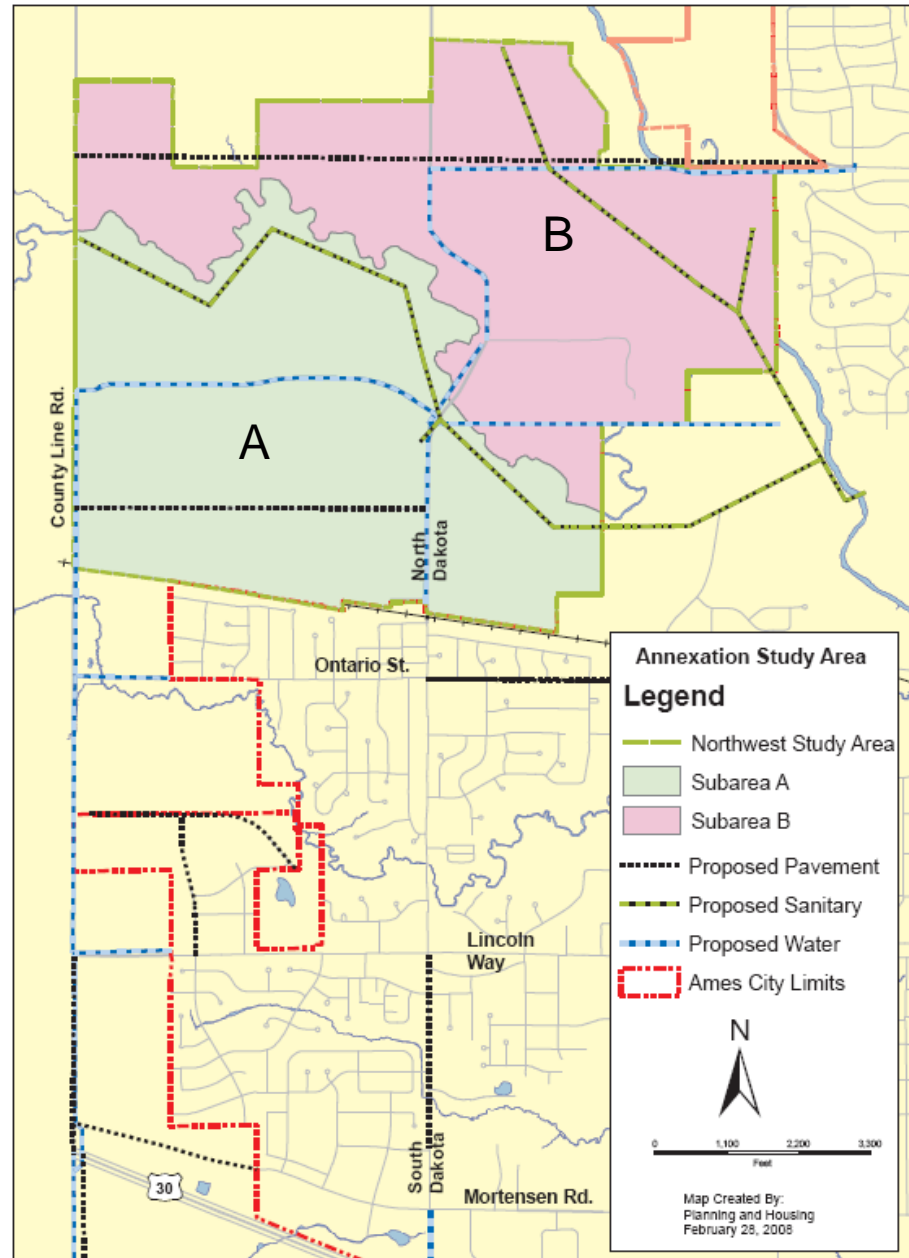


Southwest Oversize Costs

Area A	Area B	Area C	Area D	Total
\$1,066,047	\$1,419,328	\$1,122,830	\$365,287	\$3,973,492
Cost per Acre				
\$3,886	\$6,314	\$4,104	\$8,599	\$4,874



Northwest Study Area



Northwest Infrastructure Costs

Area A	Area B	Total
\$6,554,278	\$2,916,414	\$9,470,692
Cost per Acre		
\$14,427	\$8,895	\$12,108

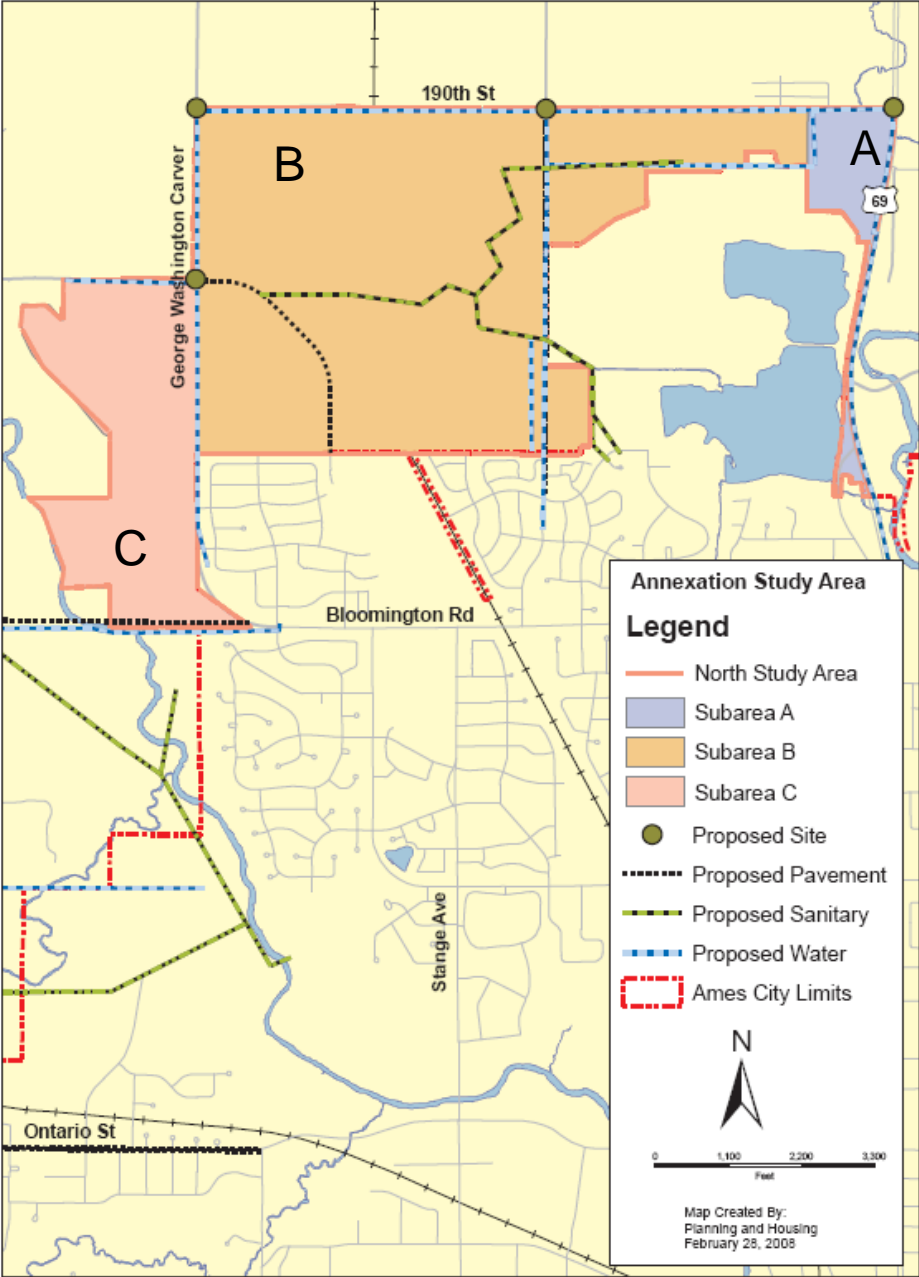


Northwest Oversize Costs

Area A	Area B	Total
\$1,509,097	\$838,019	\$2,347,116
Cost per Acre		
\$3,322	\$2,556	\$3,001



North Study Area



North Infrastructure Costs

Area A	Area B	Area C	Total
\$1,802,039	\$7,098,912	\$1,451,642	\$10,352,593
Cost per Acre			
\$69,043	\$21,844	\$12,687	\$22,240



North Oversize Costs

Area A	Area B	Area C	Total
\$680,013	\$1,503,545	\$532,692	\$2,716,250
Cost per Acre			
\$26,054	\$4,627	\$4,656	\$6,237



Network Traffic Improvements

S. Dakota Ave. Widening (Lincoln Way to Mortensen Rd.)	\$2,000,000
Bloomington Road West (G.W. Carver Ave. to County Line Rd.)	\$18,700,000
N. Dakota Ave. Overpass over UP Tracks	\$5,000,000
Bloomington Road East (Grand Ave. to 570 th Ave.)	\$25,000,000
US 69 Widening (190 th St to existing four-lane)	\$3,200,000



Other Capital Costs

	Southwest	Northwest	North
Fire Dept	\$2,340,000	\$2,340,000	\$3,340,000
CyRide	\$1,005,000	\$335,000	\$335,000
Total	\$3,345,000	\$2,675,000	\$3,675,000



Annual Operating Costs

	Southwest	Northwest	North
Fire Dept.	0	0	\$868,000
CyRide	\$263,699	\$97,131	\$109,544
Total	\$263,699	\$97,131	\$977,544



Summary Sheet

	Southwest Total	Northwest Total	North Total
Gross Acres	1,751.98	1,671.32	1,065.54
Net Developable Acres	815.18	782.17	465.50
Projected Population	9,375	8,995	5,353
Total Infrastructure Costs	\$18,954,495	\$9,470,692	\$10,352,593
Total Oversize Costs	\$3,973,492	\$2,347,116	\$2,716,250
Fire Station Relocation	\$2,340,000	\$2,340,000	\$3,340,000
CyRide Capital Costs	\$1,005,000	\$335,000	\$335,000
Total Infrastructure Cost per Developable Acre	\$27,355	\$15,528	\$30,134
Total Oversize Cost per Developable Acre	\$8,978	\$6,421	\$13,730
Total Infrastructure Cost per Capita	\$2,379	\$1,350	\$2,620
Total Oversize Cost per Capita	\$781	\$558	\$2,744
Fire Station Operating Costs	-	-	\$868,000
CyRide Operating Costs	\$263,699	\$97,131	\$109,544
Total Annual Operating Costs	\$263,699	\$97,131	\$977,544
Total Annual Operating Cost per Developable Acre	\$323	\$124	\$2,100
Total Annual Operating Cost per Capita	\$28	\$11	\$183
Net Developable Acres in Ames Community School District	461.58	219.57	1.92
Dwelling Units in Ames Community School District	2308	1100	10

Current Policies

- Land Use Policy Plan has identified priorities in the Southwest and Northwest
- Capital Investment Strategy reflects these Priorities
- Long Range Transportation Plan reflects these Priorities
- Urban Fringe Area Plan based on these Priorities



Findings

- Growth to the Southwest provides the greatest Net Developable Acres (815.18 acres), followed by growth to the Northwest (782.17 acres), then to the North (465.50 acres).
- Growth to the Southwest provides the greatest population increase (9,375), followed by growth to the Northwest (8,995), then to the North (5,353).
- The Land Use Policy Plan's 2030 population targets could be met by the Southwest growth area alone (63,209); by the Northwest growth area alone (62,829); or by the North growth area (59,187) in combination with some portion of the Southwest or Northwest.



Findings (cont'd)

- Development of the Southwest growth area provides the greatest growth for the Ames Community School District (2,308 dwelling units), followed by the Northwest (1,098 dwelling units), and the North (10 dwelling units).
- Further growth beyond the Southwest and Northwest growth areas is constrained by ISU-owned land.



Findings (cont'd)

- Growth to the Southwest has the greatest capital and infrastructure total cost (22,299,495).
- Growth to the Northwest has the least capital and infrastructure total cost (\$12,145,692).
- Growth to the Southwest has the greatest capital and infrastructure oversize cost (\$7,318,492).
- Growth to the Northwest has the least capital and infrastructure oversize cost (\$5,022,116).



Findings (cont'd)

- Growth to the North has the greatest capital and infrastructure total cost per net developable acre (\$30,134).
- Growth to the Northwest has the least capital and infrastructure total cost per net developable acre (\$15,528).
- Growth to the North has the greatest capital and infrastructure oversize cost per net developable acre (\$13,730).
- Growth to the Northwest has the least capital and infrastructure oversize cost per net developable acre (\$6,421).



Findings (cont'd)

- Growth to the North requires an additional fire station to construct and equip (\$3,340,000).
- Growth to the Northwest and/or the Southwest requires the relocation of Fire Station #2 (\$2,340,000)
- Growth to the Southwest requires two additional CyRide buses (\$670,000) more than growth to the Northwest or North.



Findings (cont'd)

- Growth to the North requires annual operational costs of a new fire station (\$868,000).
- Growth to the Southwest requires annual operational costs of CyRide (about \$160,000) more than growth to the Northwest or North.



Other Issues

- In addition to considering the cost-benefit analysis above in order to select a preferred growth direction, the City Council could also take into consideration directional growth that allows the City to best protect valued environmental resources such as Ada Hayden Heritage Park.



Other Issues (cont'd)

- While the Council may desire to choose the most cost-effective direction for growth, it should be emphasized that unless the property owners are willing to make their land available for development, the City will not be able to reach its growth needs in that given direction.



Other Issues (cont'd)

- In addition to the cost-benefit analysis, the City Council might also want to consider the potential for expansion beyond the 2030 time frame of the LUPP for each of the growth areas.



Other Issues (cont'd)

- In terms of long-range transportation planning, the Council should also consider how changes in the priority growth areas impact the Long-Range Transportation Plan and the proposed network traffic improvements. However, answers to these questions will not be available until the new Plan is completed (by October 2010).



Other Issues (cont'd)

- Although the current Land Use Policy Plan draws a growth boundary at the Boone County line, the Council could consider moving across this roadway. This would involve an analysis of the infrastructure requirements to serve an expanded area directly to the west of the current planning area.



- Questions?
- Discussion

