

Staff Report
LUPP Update: A Snapshot
December 8, 2009

OBJECTIVE OF THE STAFF REPORT

The Planning and Zoning Commission undertook a review of the Land Use Policy Plan earlier this year. It reviewed the goals and policies and discussed its various implementation strategies. From that review, the Commission affirmed the relevancy of the Land Use Policy Plan but stated that the assumptions of growth and development should be reviewed to see if adjustments might be necessary. At the joint meeting with the City Council, the Planning and Zoning Commission reiterated its desire to have staff prepare a status report on the implementation of the Land Use Policy Plan—a “snapshot in time”—of how the City is fulfilling the projections of the 1997 LUPP. At that meeting, the City Council directed staff to prepare a summary evaluation of growth in Ames since 1997. This snapshot can be used to evaluate whether the projections, and hence the assumptions upon which the entire plan is based, are still valid.

This report attempts to quantify many of the numeric goals outlined in the 1997 Land Use Policy Plan and, using current available data, determine whether the City is on track to meet, exceed or fall short of the 2030 projections.

This report will look at population growth, both within the City of Ames as well as at the county and state levels. Comparisons will be made to the Des Moines metropolitan statistical area (MSA) of Polk, Warren, and Dallas counties and to the projections from the Land Use Policy Plan. It will also report on housing units and available employment data, comparing the 2030 projections with current figures and with the Des Moines MSA. It will also quantify the extent of land annexation since 1997.

POPULATION

Table A shows the U.S. Census Bureau population figures for Ames, Story County and the State of Iowa for the LUPP base year, 1997, and the years 2000 through 2008. Data for 2000 are from the decennial census—data for other years are from annual estimates released by the Census Bureau in 2008. Another decennial census will occur in 2010 which can be used to validate the annual estimates.

TABLE A—POPULATION CHANGE

	1997 ¹	2000 ²	2001 ³	2002	2003	2004	2005	2006	2007	2008
AMES	48,238	50,731	50,688	52,013	52,037	52,554	52,599	54,012	55,599	56,510
PCT. GROWTH			-0.08%	2.6%	0.05%	1.0%	0.1%	2.7%	2.9%	1.6%
Ames Annualized Growth (1997-2008)										1.60%
STORY COUNTY	74,922	79,981	80,052	81,607	81,481	81,957	81,852	83,505	85,306	86,754
PCT. GROWTH			.08%	1.9%	-0.2%	0.6%	-0.1%	2.0%	2.2%	1.7%
Story County Annualized Growth (2000-2008)										1.48%
STATE OF IOWA	2,854,396	2,926,324	2,929,294	2,929,395	2,933,407	2,942,739	2,951,775	2,967,270	2,983,360	3,002,555
PCT. GROWTH			0.1%	0.00%	0.1%	0.3%	0.3%	0.5%	0.5%	0.6%
State of Iowa Annualized Growth (2000-2008)										0.51%

Over the period 1997-2008, Ames has had an annualized growth rate of 1.60 percent. This compares to an annualized growth rate of 1.48 percent for all of Story County, and 0.51 percent for the State of Iowa.

Regional Comparisons

Table B, below, shows the U.S. Census Bureau population figures for Ames, Story County, Polk County, the Des Moines metropolitan statistical area (Polk, Dallas, and Warren counties), and the State of Iowa for 1997, 2000 and 2008, as well as the annualized growth rate 1997 to 2008.

TABLE B—LOCAL AND REGIONAL POPULATION CHANGE⁴

	1997	2000	2008	ANNUALIZED GROWTH
AMES	48,238	50,731	56,510	1.60%
STORY COUNTY	74,922	79,981	86,754	1.48%
POLK COUNTY	356,245	374,601	424,778	1.78%
DES MOINES MSA	431,812	456,022	529,767	2.07%
STATE OF IOWA	2,854,396	2,926,324	3,002,555	0.51%

LUPP Projections

Table C, below, shows the LUPP projections for the City of Ames—high, target, and low projections. These data are directly from the Land Use Policy Plan and represent the range of population projections that were prepared in 1997 for that document.

¹ Base line data at time of LUPP development

² 2000 population is from Census **count** on April 1, 2000

³ 2001-2008 populations are from Census **estimates** as of July 1 of estimated year

⁴ Data sources are the same as for Table A.



TABLE C—LUPP POPULATION PROJECTIONS, CITY OF AMES

YEAR	HIGH	TARGET	LOW
1990	47,198	47,198	47,198
1995	49,690	48,550	48,050
2000	51,900	49,900	48,850
2005	53,600	51,600	49,700
2010	55,600	53,600	50,550
2015	57,600	55,600	51,450
2020	59,600	57,600	52,350
2030	61,600	59,600	54,250

The Land Use Policy Plan further projects a population for the City of Ames and the peripheral planning area by 2030 of between 65,000 and 67,000. The projection for all of Story County for that year is between 94,000 and 96,000.

Student Population

The population projections in the 1997 Land Use Policy Plan were created with the assumption that the enrollment at Iowa State University would remain. In 1997, the enrollment at ISU was 25,384. The 2008 enrollment was 26,856—an increase of 1,472. (2009 enrollment was even higher at 27,945.) Therefore, some of the population growth that Ames has experienced can be attributed to climbing enrollment at the university.

Staff Projections

Table D, below, shows a population projection for Ames and Story County prepared for this report by City planning staff. A linear regression model extrapolated the given population values from 2000 to 2008 and projected them to the year 2030. Based on recent growth in this decade, the population of Ames is projected to increase to over 71,000 by 2030. Using the same methodology and data sources, the population for Story County is projected to be 102,875 by 2030.

TABLE D—PROJECTED GROWTH

	1997	2000	2008	2030 ⁵
AMES	48,238	50,731	56,510	71,349

⁵ This projection was created using the FORECAST function in Excel. It predicts independent values using a linear regression model from known existing values. The regression model uses the U.S. Census Bureau counts for 2000 and the population estimates for 2001-2008. These were projected out to 2030. (Other regression models could be run using population values for other years as data points.) The limitation of this regression model projection is that it cannot accurately predict the four components of population change (births, deaths, in-migration, and out-migration) on a local scale. It cannot account for policy initiatives, market conditions, government constraints, or local economic changes that may impact any of these components. Another limitation of this particular regression analysis is that the data points (U.S. Census Bureau estimates) are estimates that may or may not reflect the actual population of Ames in any particular year. The validity of the yearly estimates will not be known until verified by the release of the 2010 decennial census data, likely in late 2010 or early 2011. See “Notes about Population Estimates,” in this section.



	1997	2000	2008	2030 ⁵
STORY COUNTY		79,981	86,754	102,875

Under the current growth priorities of the Land Use Policy Plan (Southwest and Northwest), these developable land areas can accommodate a population of 77,157. This number was derived from an estimate of the current population, as well as the population that can be accommodated on the available land within the City limits and within the priority growth areas that were calculated for the 2008 Targeted Growth Study. The population that can be accommodated in the available lands assumes a development density of 5.00 housing units per acre and 2.30 persons per housing unit.

Notes about Population Estimate

U.S. Census Bureau estimates are prepared annually at the county level using estimated demographic components of births, deaths, in-migrations, and out-migrations. These components are added or subtracted to the base population count gathered at the 2000 Census.

For city level population estimates, the Census Bureau distributes the county level estimates to sub-county levels using a housing distributive method. This method calculates the number of housing units and group quarters population using building and demolition permit information supplied by the local jurisdictions. The persons per household from the previous census is applied to the number of households and the estimated population of group quarters is added to obtain a draft city estimate, which then is adjusted across all jurisdictions within the county to balance the county-level estimate calculated previously. City estimates are calculated for July 1 of every year.

These methodologies are repeated yearly so that, for example, the 2007 estimates that were calculated in 2007 may be different than the 2007 estimates that are calculated in 2008. The accuracy of these estimates will only be validated when the 2010 decennial census data are released next year.

HOUSING

Housing development in the City can be reviewed in the following table. Table E, below, shows housing data compiled by the U.S. Census Bureau for 2000 and 2008. The housing figures are estimates based on survey data collected from sample households in Ames over the years 2006-2008.

TABLE E—AMES HOUSING COMPONENTS AND CHANGE

	2000	2008 ⁶	2000-2008 PCT. CHANGE
TOTAL HOUSING UNITS	18,709	22,115	18.2%
OCCUPIED HOUSING UNITS	18,045	20,774	15.1%

⁶ Although noted as 2008, these data are from the 2006-2008 American Community Survey.



	2000	2008 ⁶	2000-2008 PCT. CHANGE
VACANT HOUSING UNITS	664	1,341	102.0%
OCCUPANCY RATE	96.5%	93.9%	
OWNER-OCCUPIED	8,326	9,208	10.6%
RENTER-OCCUPIED	9,719	11,566	19.0%
OWNER-OCCUPIED RATE	46.1%	44.3%	
RENTER-OCCUPIED RATE	53.9%	55.7%	
UNITS IN STRUCTURE			
1, DETACHED	8,050	9,150	13.7%
1, ATTACHED	1,214	1,534	26.4%
2	1,180	1,134	-3.9%
3 OR 4	1,358	1,024	-24.6%
5 TO 9	1,613	1,827	13.3%
10 TO 19	1,835	3,167	72.6%
20 OR MORE	2,642	3,717	40.7%
MOBILE HOME	817	561	-31.3%

Regional Comparisons

Table F, below, shows the U.S. Census Bureau total number of housing units for Ames, Story County, Polk County, and the Des Moines metropolitan statistical area (Polk, Dallas, and Warren Counties) as well as the percent change from 2000 to 2008.

TABLE F—LOCAL AND REGIONAL HOUSING GROWTH

	2000	2008	2000-2008 PCT. CHANGE
AMES	18,709	22,115	18.2%
STORY COUNTY	30,630	34,466	12.5%
POLK COUNTY	156,447	182,750	16.8%
DES MOINES MSA	188,265	222,556	18.2%

LUPP Projections

The Land Use Policy Plan projects housing for the City of Ames to rise to 23,000 units by 2030 to accommodate the LUPP's population projections. These figures are reflected in Table G, below.

TABLE G—LUPP HOUSING PROJECTIONS, CITY OF AMES

YEAR	HOUSING UNITS
1990	16,051
1995	17,750
2000	18,300
2005	19,200
2010	20,300
2015	21,050
2020	21,800
2030	23,000



Notes about Housing Data

Housing data are from the U.S. Census Bureau 2000 Decennial Census and the 2006-2008 American Community Survey (ACS). Both the Census and ACS use sample data from household surveys to obtain estimates. The sample size and methodologies of the 2000 Census are different from that of the ACS (and therefore have differing margins of error) but are similar enough to allow comparisons over time.

EMPLOYMENT

There are several sources of data available to paint a picture of changes in employment in Story County. One major source of data is County Business Patterns, collected by the U.S. Census Bureau. Table H, below, shows the number of jobs within Story County by industry. These data are not disaggregated to city levels.

TABLE H—STORY COUNTY JOBS BY INDUSTRY

INDUSTRY	1998 JOBS	1998 ESTABLISHMENTS	2007 JOBS	2007 ESTABLISHMENTS	1998-2007 PCT. CHANGE
TOTAL	26,903	1,842	29,859	2,018	11.0%
FORESTRY, FISHING, HUNTING, AGRICULTURAL SUPPORT	95	5	124	12	30.5%
MINING	65	3	*	3	
UTILITIES	*	2	*	2	
CONSTRUCTION	1,913	188	1,850	216	-3.3%
MANUFACTURING	3,894	77	4,663	72	19.7%
WHOLESALE TRADE	839	92	1,024	88	22.1%
RETAIL TRADE	5,008	346	4,742	324	-5.3%
TRANSPORTATION AND WAREHOUSING	265	32	439	37	65.7%
INFORMATION	551	44	590	39	7.1%
FINANCE AND INSURANCE	765	104	967	141	26.4%
REAL ESTATE AND RENTAL AND LEASING	406	75	345	96	-15.0%
PROFESSIONAL, SCIENTIFIC, AND TECHNICAL SERVICES	2,065	173	1,278	209	-38.1%
MANAGEMENT OF COMPANIES AND ENTERPRISES	459	10	281	11	-38.8%
ADMINISTRATIVE AND SUPPORT AND WASTE MANAGEMENT AND REMEDIATION SERVICES	619	78	1,334	89	115.5%
EDUCATIONAL SERVICES	67	14	144	23	114.9%
HEALTH CARE AND SOCIAL ASSISTANCE	3,996	135	4,926	173	23.3%



INDUSTRY	1998 JOBS	1998 ESTABLISHMENTS	2007 JOBS	2007 ESTABLISHMENTS	1998-2007 Pct. CHANGE
ARTS, ENTERTAINMENT, AND RECREATION	242	24	733	34	202.9%
ACCOMMODATION AND FOOD SERVICE	3,770	197	4,683	220	24.2%
OTHER SERVICES (EXCEPT PUBLIC ADMINISTRATION)	1,780	227	1,639	226	-7.9%
AUXILIARIES	*	2	n/a	n/a	
UNCLASSIFIED ESTABLISHMENT	7	14	0	3	-100.0%

These data show an 11 percent increase in jobs in Story County in the period 1998 to 2007. Notable increases are manufacturing (up 19.7 percent); wholesale trade (up 22.1 percent); retail trade (down 5.3 percent); professional, scientific, technical (down 38.8 percent); health care and social assistance (up 23.3 percent); and accommodations and food service (up 24.2 percent).

A second source of employment data is from Iowa Workforce Development. Table I, below, shows the total numbers of non-farm jobs located in Story County and the Des Moines MSA. However, due to the availability of the data, The Des Moines MSA includes all five counties (Polk, Dallas, Warren, Madison, and Guthrie). “Goods Producing” and “Service Providing” are the two components of “Total Non-Farm” jobs. Within “Service Providing” are “Private Service” and “Government.” “Total Private” comprises “Goods Producing” and “Private Service.”

TABLE I—STORY COUNTY AND DES MOINES MSA JOBS BY SECTOR

SECTOR	1998 JOBS	2007 JOBS	1998-2007 DIFFERENCE	1998-2007 PCT. CHANGE
STORY COUNTY				
TOTAL NON-FARM	44,870	47,500	2,630	5.9%
GOODS PRODUCING	6,190	6,800	610	9.6%
SERVICE PROVIDING	38,680	40,700	2,020	5.2%
PRIVATE SERVICE	19,300	21,700	2,400	12.4%
GOVERNMENT	19,380	19,000	-380	-2.0%
TOTAL PRIVATE	25,490	28,500	3,010	11.8%
DES MOINES MSA PLUS GUTHRIE AND MADISON COUNTIES				
TOTAL NON-FARM	285,770	322,700	36,930	12.9%
GOODS PRODUCING	36,400	36,800	400	1.1%
SERVICE PROVIDING	249,380	285,900	36,520	14.6%
PRIVATE SERVICE	212,850	245,100	32,250	15.2%
GOVERNMENT	36,530	40,800	4,270	11.7%
TOTAL PRIVATE	249,250	253,400	4,150	16.3%



These data show nearly a 6 percent rise in the number of jobs within Story County. The number of jobs within the private sector has increased 11.8 percent while total federal, state, and local jobs have decreased 2.0 percent.

The growth rate for total jobs in the five counties that constitute the West Des Moines/Des Moines MSA is double that for Story County. And while the number of jobs involved in the production of goods in Story County has grown eight times faster than in the central counties, jobs providing services has grown at only one third the rate. From 1998 to 2007, private sector jobs in the central counties have grown 50 percent faster than in Story County. In that same time period, government jobs in Story County have declined 2.0 percent, while in the central counties they have grown nearly 12 percent.

Local Labor Force

Iowa Workforce Development also provides information for the City of Ames. However, these data show the number of residents of Ames who are working, regardless of where those jobs actually are located. Table J, below, shows the number of people who reside in Ames who are in the labor force and their employment status. These data do not indicate the locations where the persons work, whether they work full-time or part time, or in what industry they work.

TABLE J—CITY OF AMES LABOR FORCE

EMPLOYMENT	1998	2007	1998-2007 DIFFERENCE	1998-2007 PCT. CHANGE
RESIDENT CIVILIAN LABOR FORCE	29,750	31,700	1,950	6.6%
RESIDENT EMPLOYED	28,920	30,900	1,980	6.8%
RESIDENT UNEMPLOYED	830	800	-30	-3.6%
RESIDENT UNEMPLOYED PERCENT	2.8%	2.5%		

The Land Use Policy Plan provides projections for employment for Ames and Story County. The projections include a low projection and a high projection. Table K, below, show those projections.

TABLE K—LUPP EMPLOYMENT PROJECTIONS

JURISDICTION	2030-LOW	2030-HIGH	MID-RANGE ⁷
CITY OF AMES	33,700	35,050	34,375
STORY COUNTY	50,800	52,300	51,550

The LUPP projections also include future jobs in various sectors within the City of Ames. This information is available only through the decennial census for which data won't be released until 2011. However, Table I (Story County and Des Moines MSA Jobs by Sector) shows there are 47,500 jobs in the County. Story County has

⁷ The Land Use Policy Plan did not include a “mid-range” projection—only a high and a low. The mid-range projection was added for this staff report only to have a single future projection for which progress towards could be measured.



increased the number of jobs in the County by 2,630 towards the projected mid-range of 51,550.

It would not be appropriate, though, to use Table J (City of Ames Labor Force) to compare progress towards the 2030 employment projection for the City of Ames. As noted above, the city-level employment numbers do not count the jobs within Ames—only the residents of Ames that are employed. Data to make that comparison will be available through the 2010 decennial census in 2011.

Notes about County Business Patterns Data

County Business Patterns is an annual report that provides sub-national economic data by industry. The series is useful for studying the economic activity of small areas; analyzing economic changes over time; and as a benchmark for statistical series, surveys, and databases between economic censuses. Payroll and employment data are tabulated from administrative records for single-unit firms and a combination of administrative records and survey-collected data for multi-unit firms. They are not subject to sampling error, but are subject to nonsampling errors, which can be attributed to several sources: inability to identify all cases that should be in the universe; definition and classification difficulties; errors in recording or coding the data obtained; and other errors of coverage, processing, and estimation for missing or misreported data.

County Business Patterns covers most of the country's economic activity. The series excludes data on self-employed individuals, employees of private households, railroad employees, agricultural production employees, and most government employees. The data are disaggregated by industry down to the two-digit North American Industrial Classification System. The most recent available data are for 2007 and, therefore, do not reflect recent job losses due to the national recession which began in December, 2007.

Notes about Iowa Workforce Development Data

Iowa Workforce Development produces Labor Force Data describing total numbers of jobs in broad categories. Unlike County Business Patterns, these data include government jobs; however the private sector jobs are not disaggregated by industry. These data are collected statewide and identify the jobs within the county, regardless of where the worker lives. This “place of work” concept is used to interpret the employment by industry. This means that the number of workers shown for each industry includes nonresidents of the labor area as well as residents. Payroll information provided by a monthly sample of employers is used to develop an employment level for each industry. At the end of each year, the industry levels are benchmarked to employer tax records compiled by Iowa Workforce Development. The tax records provide a virtual universe count of payroll employment in Iowa.



ANNEXATION

Table L, below, shows the geographic area of the corporate city limits of Ames in 1997 and 2008.

TABLE L—ANNEXATION

YEAR	AREA IN ACRES	AREA IN SQ. MILES
1997	13,665.61	21.35
2008	15,551.76	24.30

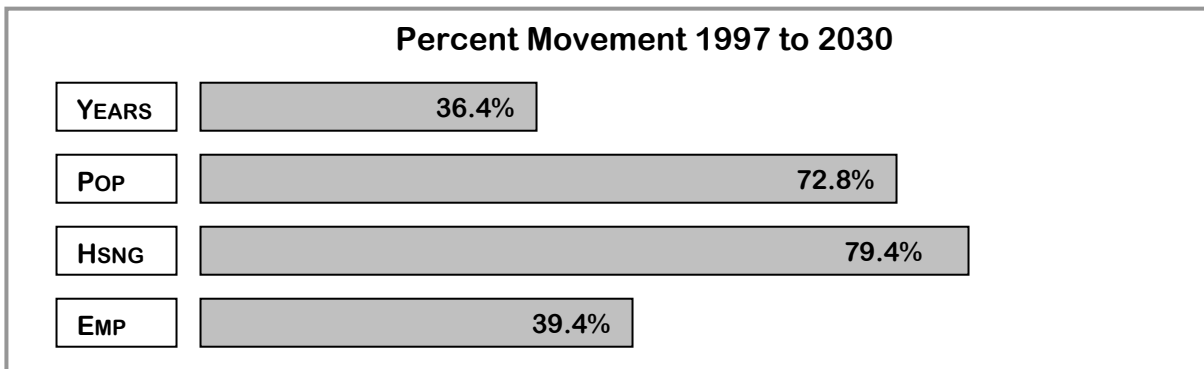
Since 1994, the City has annexed 1,886.15 acres (2.95 square miles), a 13.8 percent growth in land area.

The Land Use Policy Plan did not have any specific projections for annexation. The plan estimated the total area that would need to be developed to accommodate the residential, commercial, industrial and other uses anticipated to support the projected population in 2030. This area would come from the city or from the planning area—an area that comprises a total of 54,108 acres (84.54 square miles).

SUMMARY

The Land Use Policy Plan was adopted in 1997 with a planning horizon of the year 2030—a 33-year outlook. It is now 2009. Twelve years have passed since the adoption of the plan with 21 years left to the horizon. Ames has moved 36 percent of the temporal distance to that 2030 outlook.

TABLE M—CHANGE IN MEASURES 1997 TO 2030



What Table M, above, shows is that while Ames has moved 36 percent of the years from 1997 to 2030, it has moved nearly 73 percent towards its projected population, nearly 80 percent towards its anticipated housing goals and over 39 percent towards its employment projections.

While growth in employment has lagged behind growth in population and housing units, it likely could be attributed to the increase in university enrollment. The data reflect that while students contribute to the population and housing numbers, they



may not be employed. In any case, these three measures of growth—population, housing, employment—indicate a growth above the rate expected and necessary to reach the Land Use Policy Plan projections for 2030.

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