

MEMO

To: Professor Kirk McClure
 From: Zach Tusinger
 Date: March 4, 2015
 Re: Assignment 2: Population Projection Models (Part 1)

This document summarizes population projections of Kansas City, KS by age and gender cohorts for the year 2020. **The projected populations for 2020 are 74,500 for all males and 76,000 for all females. The total projected population for 2020 is 151,000.**

General Assumptions Used in All Standard Cohort Survival Projections:

- The 2020 projected population is based upon the aging of the initial population counts.
- The rates of births, deaths, and migration are established by the individual trends in the data from each element.
- In practice, migration data are often not available. Therefore, the effects of migration can often be assumed to be zero.
- Current population growth trends will continue without significant influence from unknown future events.

Summary of Projections:

- Total projected population for 2020 is 150,500.
- Total projected population for 2020 is approximately 5,000 more than the population in 2010.
- There will be approximately 600 births per year from 2010 to 2020.
- There are projected to be about 1,500 more females than males in 2020.

Population Projection for 2020		
Age Cohort	Males	Females
0-5	1,601	1,552
5-9	1,619	1,554
10-14	6,485	6,285
15-19	5,914	5,677
20-24	5,350	5,213
25-29	5,305	5,019
30-34	5,109	5,066
35-39	5,909	5,746
40-44	5,345	5,204
45-49	4,869	4,599
50-54	4,382	4,345
55-59	4,870	4,855
60-64	4,788	4,887
65-69	4,028	4,204
70-74	3,036	3,486
75-79	2,058	2,377
80-84	1,462	1,906
85-89	1,143	1,551
90+	1,428	2,595
Totals	74,701	76,122

STANDARD COHORT SURVIVAL PROJECTION FOR KANSAS CITY, KANSAS

Population Projections by Cohort Survival to 2020				
Age Cohort	Male Pop. 2010	Male Pop. 2020	Female Pop. 2010	Female Pop. 2020
0-5	6,530	1,601	6,325	1,552
5-9	5,916	1,619	5,679	1,554
10-14	5,351	6,485	5,214	6,285
15-19	5,307	5,914	5,021	5,677
20-24	5,117	5,350	5,073	5,213
25-29	5,914	5,305	5,751	5,019
30-34	5,351	5,109	5,209	5,066
35-39	4,878	5,909	4,607	5,746
40-44	4,391	5,345	4,354	5,204
45-49	4,884	4,869	4,869	4,599
50-54	4,810	4,382	4,906	4,345
55-59	4,064	4,870	4,239	4,855
60-64	3,099	4,788	3,554	4,887
65-69	2,204	4,028	2,544	4,204
70-74	1,508	3,036	1,966	3,486
75-79	1,206	2,058	1,638	2,377
80-84	828	1,462	1,350	1,906
85-89	498	1,143	899	1,551
90+	201	1,428	531	2,595
Subtotals:		74,701		76,122
Total Pop. 2020:				
				150,823

Estimates of Births per Year					
Age Cohort	Pop. Women 2010	Pop. Women 2020	Pop. Women 2015	Birth Rate	Est. Births per Year
15-19	5,021	5,677	5,349	0.0245	131
20-24	5,073	5,213	5,143	0.0282	145
25-29	5,751	5,019	5,385	0.0275	148
30-34	5,209	5,066	5,137	0.021	108
35-39	4,607	5,746	5,177	0.0165	85
40-44	4,354	5,204	4,779	0.0036	17
Total:					635