

# 5

## Future Growth



**Wadena**

Comprehensive Plan & Transportation Plan

## 5.1 OVERVIEW

Planning for future growth is an important component in the completion of a comprehensive plan. Projecting future growth of a community's population helps define future:

- Household needs
- Land consumption
- Infrastructure needs
- Demand for city services and facilities

This information also speaks to the future needs of the transportation system through the community.

This chapter will describe the different types of growth projections completed for the City of Wadena, and how they relate to the Comprehensive Plan and Transportation Plan.

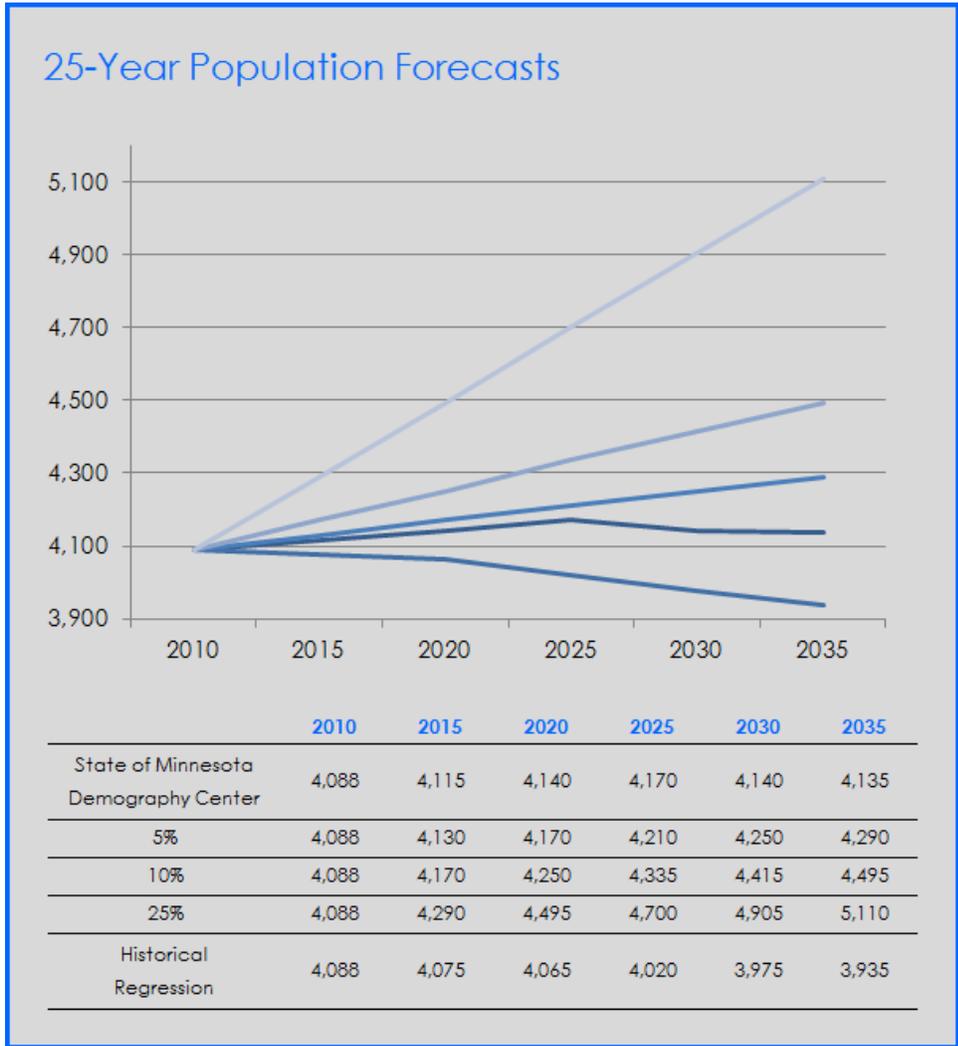
This section of the plan addresses the following elements:

- Future Population Growth
- Household Projections
- Relationship to Transportation Plan

## 5.2 FUTURE POPULATION GROWTH

To gauge the level of growth and associated development throughout the life of this Comprehensive Plan, future population growth must be estimated. **Table 5-1** displays a potential 2035 population for Wadena based upon four different trends. Over the 25 year planning horizon, 5 percent, 10 percent and 25 percent growth rates were considered. These growth scenarios provide a population increase of 202 to 1,022 people. The two growth rates are compared against an estimate provided by the Minnesota Demographer and a historical regression which continues the population decline from the last decade. These population projections provide a baseline to build upon land use, household and job growth.

Table 5-1: Wadena Population Forecasts



## 5.3 HOUSEHOLD AND LAND USE PROJECTIONS

Assuming a 25 year growth of 5, 10, or 25 percent of Wadena’s population, projections were made for the amount of each type of land use that will be consumed. Based upon the existing density and percentage of land uses within Wadena’s city limits, residential populations, households, and land use consumption were calculated as shown in **Table 5-2**.

**Table 5-2: Household and Land Use Projections**

|                        | Total Population | Low Density Pop | High Density Pop | Low Density Acres | High Density Acres | Low Density Housing Units* | High Density Housing Units* | Commercial Acres | Park & Open Space Acres | Public Acres | Industrial Acres |
|------------------------|------------------|-----------------|------------------|-------------------|--------------------|----------------------------|-----------------------------|------------------|-------------------------|--------------|------------------|
| <b>5% Projection</b>   |                  |                 |                  |                   |                    |                            |                             |                  |                         |              |                  |
| 5 Year Need            | 4,130            | 2,724           | 1,406            | 519               | 73                 | 1,259                      | 852                         | 239              | 362                     | 207          | 552              |
| 10 Year Need           | 4,170            | 2,751           | 1,419            | 524               | 73                 | 1,271                      | 855                         | 241              | 365                     | 209          | 557              |
| 15 Year Need           | 4,210            | 2,777           | 1,433            | 529               | 74                 | 1,283                      | 869                         | 243              | 369                     | 211          | 562              |
| 20 Year Need           | 4,250            | 2,803           | 1,447            | 534               | 75                 | 1,295                      | 879                         | 246              | 372                     | 213          | 568              |
| 25 Year Need           | 4,290            | 2,830           | 1,460            | 539               | 75                 | 1,307                      | 885                         | 248              | 376                     | 215          | 573              |
| <b>Total Increase:</b> | <b>202</b>       | <b>235</b>      | <b>121</b>       | <b>45</b>         | <b>6</b>           | <b>108</b>                 | <b>74</b>                   | <b>12</b>        | <b>18</b>               | <b>10</b>    | <b>27</b>        |
| <b>10% Projection</b>  |                  |                 |                  |                   |                    |                            |                             |                  |                         |              |                  |
| 5 Year Need            | 4,170            | 2,751           | 1,419            | 524               | 73                 | 1,271                      | 855                         | 241              | 365                     | 209          | 557              |
| 10 Year Need           | 4,250            | 2,803           | 1,447            | 534               | 75                 | 1,295                      | 879                         | 246              | 372                     | 213          | 568              |
| 15 Year Need           | 4,335            | 2,859           | 1,476            | 545               | 76                 | 1,322                      | 890                         | 251              | 380                     | 217          | 579              |
| 20 Year Need           | 4,415            | 2,912           | 1,503            | 555               | 78                 | 1,346                      | 914                         | 255              | 387                     | 221          | 590              |
| 25 Year Need           | 4,495            | 2,965           | 1,530            | 565               | 79                 | 1,370                      | 925                         | 260              | 394                     | 225          | 600              |
| <b>Total Increase:</b> | <b>407</b>       | <b>370</b>      | <b>191</b>       | <b>71</b>         | <b>10</b>          | <b>171</b>                 | <b>115</b>                  | <b>24</b>        | <b>36</b>               | <b>20</b>    | <b>54</b>        |
| <b>25% Projection</b>  |                  |                 |                  |                   |                    |                            |                             |                  |                         |              |                  |
| 5 Year Need            | 4,290            | 2,830           | 1,460            | 539               | 75                 | 1,307                      | 793                         | 248              | 376                     | 215          | 573              |
| 10 Year Need           | 4,495            | 2,965           | 1,530            | 564               | 79                 | 1,370                      | 831                         | 259              | 394                     | 225          | 600              |
| 15 Year Need           | 4,700            | 3,100           | 1,600            | 590               | 82                 | 1,432                      | 869                         | 271              | 412                     | 236          | 628              |
| 20 Year Need           | 4,905            | 3,235           | 1,670            | 616               | 86                 | 1,495                      | 907                         | 283              | 430                     | 246          | 665              |
| 25 Year Need           | 5,110            | 3,371           | 1,739            | 642               | 89                 | 1,557                      | 945                         | 295              | 447                     | 256          | 683              |
| <b>Total Increase:</b> | <b>1,022</b>     | <b>776</b>      | <b>246</b>       | <b>148</b>        | <b>20</b>          | <b>358</b>                 | <b>134</b>                  | <b>59</b>        | <b>89</b>               | <b>51</b>    | <b>137</b>       |

\*A vacancy rate of 91.54% was assumed

## HOUSEHOLD PROJECTIONS

The projected needs for household growth are based upon the population projections provided in Table 5-1. Housing projections are based upon the existing population density for low density and high density housing types (2.16 persons per low density unit and 1.86 persons per high density unit). To calculate the 25 year projections, it was assumed that this trend will continue through the 25 year projection period. The family size in Wadena decreased from 2.92 people in 2000 to 2.86 people in 2010, which is evidence of changing household trends as described in Chapter 2. If the declining family and household size trend continues and the average household size decreased by 5 percent to 2.10 persons per household, the projected number of households would increase to 2,627, or 617 new household based upon the 25 percent growth scenario.

Over the life of this plan it will be important to monitor the variation in number of new households. The average household size serves as a significant indicator of the types of households needed in the community. As future data becomes available through the census or other studies, it will be important to monitor the average household size for owner-occupied and renter-occupied dwelling units. The availability of diverse housing options will be important when encouraging the in-migration of families and new residents and the retention of long-time Wadena residents who need senior living options. **Table 5-3** lists the number of new households needed to meet the 25 year need based upon the 5, 10, and 25 percent projections.

**Table 5-3: Future Household Demands**

| Projection | Total Households | New Households | Average new Households per Year |
|------------|------------------|----------------|---------------------------------|
| 5%         | 2,186            | 176            | 7                               |
| 10%        | 2,295            | 286            | 11                              |
| 25%        | 2,502            | 492            | 20                              |

Though Table 5-2 provides a total of new households projected to 2035, this number should be reassessed as new information regarding population trends and household occupancy is gathered in future years.

## LAND USE CONSUMPTION PROJECTIONS

Based upon the anticipated growth projections, estimates were made to identify the acreage that is likely to be consumed by the amount of development necessary to accommodate the growth. This acreage is separated into land use categories, and is projected for 25 years and displayed in five-year increments as

shown in Table 5-2. These assumptions were based upon existing densities within the city limits for each land use.

Acreage consumption by 2035 is estimated to range from 233 acres to approximately 500 acres, which excludes the required acreage to provide public streets and the necessary infrastructure needed to service these areas. To support the more likely growth of the 10 percent scenario, 215 acres of development would be needed. A majority of this acreage under both scenarios would be developed as low density residential housing units, followed by industrial acreage to support job growth.

## 5.4 RELATIONSHIP TO TRANSPORTATION PLAN

The Wadena Transportation Plan was completed in conjunction with the Comprehensive Plan. The planning process for the Transportation Plan included the development of a travel demand forecast model for the purpose of estimating the future traffic volumes through the City of Wadena. In the development of the model the land use and housing projections of the Comprehensive Plan were used in combination with transportation data (e.g., O-D survey, existing roadway network, etc.). Each land use variable was spatially summarized by transportation analysis zones, which divided the study area into 157 unique geographical zones. Both the 10 and 25 percent growth scenarios were used to develop two land use alternatives that were modeled for the year 2035 in the travel demand model.