CHAPPELL, NEBRASKA

HANNA:KEELAN ASSOCIATES, P.C.
COMMUNITY PLANNING & RESEARCH
The Comprehensive Plan-Update was funded by the City of Chappell, and the Nebraska Investment Finance Authority. The Comprehensive Plan was completed with the guidance and direction of the Chappell Planning Commission.
# TABLE OF CONTENTS

**SECTION**  | **TITLE**  | **PAGE**  
---|---|---
**SECTION 1**  | THE CHAPPELL PLANNING PROCESS  | 1.1  
  - Introduction  | 1.1  
  - Planning Period  | 1.1  
  - Planning Jurisdiction  | 1.1  
  - Authority To Plan  | 1.1  
  - Responsible Growth And Development  | 1.2  
  - The Plan As A Community &  
  - Economic Development Tool  | 1.3  
  - Organization of the Plan  | 1.4  
  - Element 1  | 1.4  
  - Element 2  | 1.4  
  - Element 3  | 1.4  
**SECTION 2**  | GOALS, POLICIES & ACTION STRATEGIES  | 2.1  
  - Introduction  | 2.1  
  - Community Goals  | 2.1  
  - Community Image  | 2.3  
  - Land Use & Development  | 2.4  
  - Housing  | 2.6  
  - Public Facilities, Infrastructure &  
  Transportation  | 2.9  
  - Community & Economic Development  | 2.11  
  - Plan Maintenance & Implementation  | 2.13
TABLE OF CONTENTS.

<table>
<thead>
<tr>
<th>SECTION</th>
<th>TITLE</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>SECTION 3</td>
<td>POPULATION &amp; ECONOMIC PROFILE</td>
<td>3.1</td>
</tr>
<tr>
<td></td>
<td>- Introduction</td>
<td>3.1</td>
</tr>
<tr>
<td></td>
<td>- General Population Trends And Projections</td>
<td>3.2</td>
</tr>
<tr>
<td></td>
<td>- Income Trends And Projections</td>
<td>3.6</td>
</tr>
<tr>
<td></td>
<td>- Employment And Economic Trends</td>
<td>3.13</td>
</tr>
<tr>
<td>SECTION 4</td>
<td>LAND USE &amp; DEVELOPMENT</td>
<td>4.1</td>
</tr>
<tr>
<td></td>
<td>- Introduction</td>
<td>4.1</td>
</tr>
<tr>
<td></td>
<td>- Proper Land Use Practices</td>
<td>4.1</td>
</tr>
<tr>
<td></td>
<td>- Identification of Future Growth Areas</td>
<td>4.1</td>
</tr>
<tr>
<td></td>
<td>- Location</td>
<td>4.2</td>
</tr>
<tr>
<td></td>
<td>- Historical Development</td>
<td>4.2</td>
</tr>
<tr>
<td></td>
<td>- Population Growth</td>
<td>4.2</td>
</tr>
<tr>
<td></td>
<td>- The Natural Environment</td>
<td>4.3</td>
</tr>
<tr>
<td></td>
<td>- Soil Associations</td>
<td>4.3</td>
</tr>
<tr>
<td></td>
<td>- Watersheds</td>
<td>4.5</td>
</tr>
<tr>
<td></td>
<td>- Wellhead Protection Program (WHP)</td>
<td>4.5</td>
</tr>
<tr>
<td></td>
<td>- Climate</td>
<td>4.6</td>
</tr>
<tr>
<td></td>
<td>- The Built Environment</td>
<td>4.6</td>
</tr>
<tr>
<td></td>
<td>- Land Use Analysis</td>
<td>4.6</td>
</tr>
<tr>
<td></td>
<td>- Existing Land Use Profile</td>
<td>4.6</td>
</tr>
<tr>
<td></td>
<td>- Vacant</td>
<td>4.8</td>
</tr>
<tr>
<td></td>
<td>- Public/Quasi-Public</td>
<td>4.8</td>
</tr>
<tr>
<td></td>
<td>- Parks/Recreation</td>
<td>4.8</td>
</tr>
<tr>
<td></td>
<td>- Residential</td>
<td>4.8</td>
</tr>
<tr>
<td></td>
<td>- Commercial</td>
<td>4.11</td>
</tr>
<tr>
<td></td>
<td>- Industrial</td>
<td>4.11</td>
</tr>
<tr>
<td></td>
<td>- Land Use Comparison</td>
<td>4.11</td>
</tr>
<tr>
<td>SECTION</td>
<td>TITLE</td>
<td>PAGE</td>
</tr>
<tr>
<td>------------</td>
<td>-----------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>SECTION 4</td>
<td>Future Land Use Profile</td>
<td>4.12</td>
</tr>
<tr>
<td>(CONTINUED)</td>
<td>- Infill Developments</td>
<td>4.12</td>
</tr>
<tr>
<td></td>
<td>- Parks and Recreation</td>
<td>4.15</td>
</tr>
<tr>
<td></td>
<td>- Public/Quasi-Public</td>
<td>4.15</td>
</tr>
<tr>
<td></td>
<td>- Residential Growth Areas</td>
<td>4.15</td>
</tr>
<tr>
<td></td>
<td>- Commercial</td>
<td>4.16</td>
</tr>
<tr>
<td></td>
<td>- Industrial</td>
<td>4.16</td>
</tr>
<tr>
<td></td>
<td>- Annexation</td>
<td>4.16</td>
</tr>
<tr>
<td></td>
<td>- Environmental Assessment</td>
<td>4.17</td>
</tr>
<tr>
<td></td>
<td>- Potential Adverse Impacts</td>
<td>4.17</td>
</tr>
<tr>
<td></td>
<td>- Beneficial Impacts</td>
<td>4.18</td>
</tr>
<tr>
<td></td>
<td>- Alternatives</td>
<td>4.18</td>
</tr>
<tr>
<td></td>
<td>- Actions to Mitigate Adverse Environmental Effects</td>
<td>4.19</td>
</tr>
</tbody>
</table>

<p>| SECTION 5  | PUBLIC FACILITIES, INFRASTRUCTURE &amp; TRANSPORTATION                    | 5.1  |
|           | - Introduction                                                       | 5.1  |
|           | - Public Facilities                                                  | 5.1  |
|           | - Parks and Recreation                                               | 5.1  |
|           | - Library                                                           | 5.4  |
|           | - Museum                                                            | 5.4  |
|           | - Education                                                          | 5.4  |
|           | - Medical/Elderly Services                                           | 5.6  |
|           | - Government/Public Safety                                           | 5.6  |</p>
<table>
<thead>
<tr>
<th>SECTION</th>
<th>TITLE</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>SECTION 5</td>
<td>- Infrastructure</td>
<td>5.9</td>
</tr>
<tr>
<td>(CONTINUED)</td>
<td>- Water System</td>
<td>5.9</td>
</tr>
<tr>
<td></td>
<td>- Waste Water System</td>
<td>5.11</td>
</tr>
<tr>
<td></td>
<td>- Solid Waste</td>
<td>5.12</td>
</tr>
<tr>
<td></td>
<td>- Storm Water Drainage</td>
<td>5.12</td>
</tr>
<tr>
<td></td>
<td>- Electrical System</td>
<td>5.12</td>
</tr>
<tr>
<td></td>
<td>- Natural Gas System</td>
<td>5.12</td>
</tr>
<tr>
<td></td>
<td>- Transportation</td>
<td>5.12</td>
</tr>
<tr>
<td></td>
<td>- Existing Transportation System</td>
<td>5.12</td>
</tr>
<tr>
<td></td>
<td>- Traffic Volume</td>
<td>5.15</td>
</tr>
<tr>
<td></td>
<td>- Road Classifications</td>
<td>5.15</td>
</tr>
<tr>
<td></td>
<td>- Future Chappell Transportation System</td>
<td>5.16</td>
</tr>
<tr>
<td>SECTION 6</td>
<td>COMMUNITY &amp; ECONOMIC DEVELOPMENT INITIATIVE</td>
<td>6.1</td>
</tr>
<tr>
<td></td>
<td>- Introduction</td>
<td>6.1</td>
</tr>
<tr>
<td></td>
<td>- Existing Conditions</td>
<td>6.1</td>
</tr>
<tr>
<td></td>
<td>- Community Development Plan</td>
<td>6.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- A Need For Housing Rehabilitation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Downtown Area</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Nebraska Community Development Law</td>
</tr>
<tr>
<td></td>
<td>- Economic Development Plan</td>
<td>6.4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Economic Expectations</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Housing &amp; Economic Development</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Business &amp; Industrial Development</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Job Creation</td>
</tr>
<tr>
<td></td>
<td>- Community &amp; Economic Development Strategies</td>
<td>6.6</td>
</tr>
<tr>
<td></td>
<td>- Housing Financial Resources</td>
<td>6.7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Local Funding Options</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Local Tax Base</td>
</tr>
<tr>
<td>SECTION</td>
<td>TITLE</td>
<td>PAGE</td>
</tr>
<tr>
<td>---------</td>
<td>-------</td>
<td>------</td>
</tr>
<tr>
<td>SECTION 6 (CONTINUED)</td>
<td>- State Programs</td>
<td>6.7</td>
</tr>
<tr>
<td></td>
<td>- Regional Funding</td>
<td>6.9</td>
</tr>
<tr>
<td></td>
<td>- Federal Funding</td>
<td>6.9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SECTION 7</th>
<th>ENERGY ELEMENT</th>
<th>7.1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- Introduction</td>
<td>7.1</td>
</tr>
<tr>
<td></td>
<td>- Public Power Distribution</td>
<td>7.1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Renewable Energy Projects</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Consumption of Electricity in Chappell</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Renewable Energy Strategic Plan</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Wind Turbines and Net Metering</td>
</tr>
<tr>
<td></td>
<td>- Energy Consumption</td>
<td>7.6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Trends in Energy Consumption</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Increased Energy Costs and Conservation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Energy Conservation Policies</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>APPENDIX</th>
<th>ONE- AND SIX-YEAR PLAN FOR STREET IMPROVEMENTS</th>
</tr>
</thead>
</table>
# LIST OF TABLES

<table>
<thead>
<tr>
<th>TABLE</th>
<th>TITLE</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1</td>
<td>Population Trends &amp; Projections</td>
<td>3.3</td>
</tr>
<tr>
<td>3.2</td>
<td>Population Age Distribution Trends &amp; Projections</td>
<td>3.4</td>
</tr>
<tr>
<td>3.3</td>
<td>Specific Household Characteristics Trends &amp; Projections</td>
<td>3.5</td>
</tr>
<tr>
<td>3.4</td>
<td>Households By Income Group Trends and Projections</td>
<td>3.7</td>
</tr>
<tr>
<td>3.5</td>
<td>Persons Receiving Social Security Income</td>
<td>3.8</td>
</tr>
<tr>
<td>3.6</td>
<td>Per Capita Income Trends &amp; Projections</td>
<td>3.9</td>
</tr>
<tr>
<td>3.7</td>
<td>Estimated Owner Households By Income Cost Burdened With Housing Problems</td>
<td>3.11</td>
</tr>
<tr>
<td>3.8</td>
<td>Estimated Renter Households By Income Cost Burdened With Housing Problems</td>
<td>3.11</td>
</tr>
<tr>
<td>3.9</td>
<td>Estimated Elderly Renter Households by Income Cost Burdened With Housing Problems</td>
<td>3.12</td>
</tr>
<tr>
<td>3.10</td>
<td>Employment Data Trends and Projections</td>
<td>3.14</td>
</tr>
<tr>
<td>3.11</td>
<td>Workforce Employment By Type</td>
<td>3.15</td>
</tr>
<tr>
<td>4.1</td>
<td>Existing Land Use</td>
<td>4.7</td>
</tr>
<tr>
<td>7.1</td>
<td>MEAN Service Schedule</td>
<td>7.3</td>
</tr>
</tbody>
</table>
# LIST OF ILLUSTRATIONS

<table>
<thead>
<tr>
<th>ILLUSTRATION</th>
<th>TITLE</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>Area Location Map</td>
<td>1.2</td>
</tr>
<tr>
<td>4.1</td>
<td>Soils Illustration</td>
<td>4.3</td>
</tr>
<tr>
<td>4.2</td>
<td>Soils Association Map</td>
<td>4.4</td>
</tr>
<tr>
<td>4.3</td>
<td>Existing Land Use Map - Corporate Limits</td>
<td>4.9</td>
</tr>
<tr>
<td>4.4</td>
<td>Existing Land Use Map - Planning Jurisdiction</td>
<td>4.10</td>
</tr>
<tr>
<td>4.5</td>
<td>Future Land Use Map - Corporate Limits</td>
<td>4.13</td>
</tr>
<tr>
<td>4.6</td>
<td>Future Land Use Map - Planning Jurisdiction</td>
<td>4.14</td>
</tr>
<tr>
<td>4.7</td>
<td>Official Zoning Map - Corporate Limits</td>
<td>4.20</td>
</tr>
<tr>
<td>4.8</td>
<td>Official Zoning Map - Planning Jurisdiction</td>
<td>4.21</td>
</tr>
<tr>
<td>5.1</td>
<td>Public Facilities Map</td>
<td>5.2</td>
</tr>
<tr>
<td>5.2</td>
<td>State Functional Classifications Map</td>
<td>5.13</td>
</tr>
<tr>
<td>5.3</td>
<td>Traffic Volume Map</td>
<td>5.14</td>
</tr>
</tbody>
</table>
SECTION 1
The Chappell Planning Process.

HANNA:KEELAN ASSOCIATES, P.C.
COMMUNITY PLANNING & RESEARCH
SECTION 1
THE CHAPPELL PLANNING PROCESS.

INTRODUCTION

This Chappell Comprehensive Plan is designed to serve as a tool to assist the City in planning for future stability and development in the City and the respective One-Mile Planning Jurisdiction. The Plan contains information about existing conditions within the City, including population, land use, public facilities and utilities and transportation, and serves as an update to the City’s 2002 Plan.

The planning process included the development of a general plan, which establishes specific and practical guidelines for improving existing conditions and controlling future growth. The Plan, presents a planning program designed to identify and develop policies in the areas of land use, population, economics, public facilities and utilities, transportation and plan maintenance/implementation.

The Comprehensive Plan was prepared under the direction of the Chappell Planning Commission, with the assistance of the City Council, City Staff and planning consultants, Hanna:Keelan Associates, P.C., of Lincoln, Nebraska.

PLANNING PERIOD

The planning time period for achieving the goals, programs and community and economic development activities identified in this Chappell Comprehensive Plan is 10 years.

PLANNING JURISDICTION

The planning jurisdiction of the City of Chappell includes the Chappell Corporate Limits and the area within One-Mile of the City. The City enforces planning, zoning and subdivision regulations within the one-mile limit, in accordance with Nebraska State Statutes.

AUTHORITY TO PLAN

This Comprehensive Plan for the City of Chappell is prepared under the authority of Section 19-924 to 19-929, Nebraska State Statutes 1943, as Amended.
RESPONSIBLE GROWTH AND DEVELOPMENT

The City of Chappell is located in the panhandle of Nebraska, in Deuel County, an estimated 340 miles west of Lincoln, Nebraska and 190 miles northeast of Denver, Colorado and 1/2 mile north of the Interstate 80 corridor.

Chappell is in a position to determine the community and economic development enhancements needed and desired to better serve persons and families interested in small town living. The Community offers several commercial and professional offices. The Post Office and City Offices are located in Downtown Chappell, which is situated along 2nd Street (Highway 30), between Babcock and Ochs Avenues.
THE CHAPPELL PLANNING PROCESS.

The Chappell Comprehensive Planning Process promotes responsible growth. This includes a firm understanding of the growth potential within the existing built environs of Chappell, as well as the support for preserving the agricultural and associated natural resources adjacent the City. Undeveloped areas, within the One-Mile Planning Jurisdiction of Chappell will be assigned land uses and zoning classifications capable of preserving the integrity of these areas, while providing for controlled, well planned growth potential throughout the 2013 to 2023 planning period.

Responsible growth and development activities will include the ongoing planning and implementation of needed public facilities in Chappell. The Community is cognizant of its social and recreational needs, but will need to continue to upgrade and develop modern, accessible public facilities and infrastructure.

THE PLAN AS A COMMUNITY & ECONOMIC DEVELOPMENT TOOL

The City of Chappell Comprehensive Plan has been designed to enhance both community and economic development efforts, which will promote stability in the local economy. To accomplish this, local leaders will need to react to changing economic conditions and access programs available to meet these changes. Local decisions will need to enhance community and economic development opportunities, as well as preserve local values. Citizen input will be needed to assist and enhance this political decision making process.

Creating a Chappell Community Development Agency or Community Redevelopment Authority, as a vehicle to plan and implement residential, commercial, and industrial development activities in the City, is strongly encouraged.

The Land Use Plan for the City of Chappell, identified in this document, encourages growth and expansion of the City during the 10-year planning period. The City must improve and enhance the older sections of Chappell, as well as the Downtown and establish incentives for public and private partnerships for redevelopment to coincide with community growth and expansion. Incentives such as Tax Increment Financing, Historic Tax Credits, Community Development Block Grants and a variety of housing and economic development funding sources coupled with local lender support, should be utilized by the Community to achieve the goals contained within this Comprehensive Plan.

Providing safe, modern and affordable housing in Chappell, during the next 10 years, will insure a population base capable of supporting various important businesses and services in the Community. Housing rehabilitation activities, coupled with new housing opportunities for both elderly and young families, should be considered. The City should support housing improvement and development efforts as a means of both expanding the population and increasing the local tax base.
ORGANIZATION OF THE PLAN

The creation of the City of Chappell Comprehensive Plan included the implementation of both a qualitative and quantitative research activities, in an effort to gather pertinent information. The qualitative approach included a comprehensive citizen participation process consisting of Planning Commission and public meetings, all in an effort to assess the needs of the local citizens.

The quantitative approach included the analysis of the various components of the Comprehensive Plan utilizing numerous statistical data bases provided by the 1990, 2000 and 2010 Census, 2007-2011 American Community Survey estimates and other pertinent local, state and federal agencies.

This quantitative approach also included on-site field research activities to determine the present condition and profiles of local land use, housing, public infrastructure and facilities, transportation and environmental issues. Combining the results of these two important research approaches produced a Comprehensive Plan.

This Comprehensive Plan includes the following six Sections:

- Goals, Policies & Action Strategies
- Population, Income & Economic Profile
- Land Use & Development
- Public Facilities, Utilities & Transportation
- Community & Economic Development Initiative
- Energy Element

The system embodied in this community planning framework is a process that relies upon continuous feedback, as goals change and policies become more clearly defined. Planning is an ongoing process that requires constant monitoring and revision throughout the proposed planning period.

ELEMENT 1

This Comprehensive Plan is organized in three elements. The first element of the Comprehensive Plan is the Goals, Policies and Action Strategies. The Goals and Policies represent the foundation for which planning components are designed and eventually implemented. The Goals and Policies identified in this City of Chappell Comprehensive Plan address each component of the Plan itself. Action Strategies identify specific activities the community should undertake to accomplish the Goals and Policies.

ELEMENT 2

The second element is the Background Analysis, which presents the research, both quantitative and qualitative, necessary for the development of the Plan’s Goals, Policies and Action Strategies. This research included the investigation of demographic, economic, land use, housing, transportation and public facilities and utilities in Chappell. The careful research of past and present data allowed for the projection of future population and development needs.

ELEMENT 3

The third and final element of the Comprehensive Plan is the Planning Components, which presents general background analysis and future plans for land use, public facilities, infrastructure and transportation.
SECTION 2
Goals, Policies & Action Strategies.

HANNA:KEELAN ASSOCIATES, P.C.
COMMUNITY PLANNING & RESEARCH
A Comprehensive Plan is an essential tool to properly guide the development of a modern community. An important aspect of this planning process is the development of appropriate and specific planning Goals, Policies and Action Strategies to provide local planners direction in the administration and overall implementation of the Comprehensive Plan-Update. In essence, the goals and policies are the most fundamental elements of the Plan; the premises upon which all other elements of the Plan must relate.

Goals are broad statements, identifying the state or condition the citizenry wishes the primary components of the planning area to be or evolve into within a given length of time. Primary components include Community Image, Land Use and Development, Housing, Public Facilities, Services and Transportation and Plan Maintenance and Implementation. Goals are long-term in nature and, in the case of those identified for the Chappell Comprehensive Plan, will be active throughout the planning period 2013 to 2023.

Policies help to further define the meaning of goals. In essence, Policies are a specific statement or achievement to be accomplished as a step toward fulfilling a goal. Policies, or often referred to as objectives, are sub-parts of a Goal and are accomplished in a much shorter time space.

Action Strategies represent very specific activities to accomplish a particular Goal. In many cases, specific time lines are attached to Action Strategies and are the most measurable component of the Chappell Comprehensive Plan-Update.

COMMUNITY GOALS

The specific goals, policies and action strategies of this Comprehensive Plan-Update are included with the discussion of each respective Plan component. The first step in developing goals, policies and action strategies for this Plan is the identification of general Community Goals. The following Community Goals were developed via input from the Chappell Planning Commission in an effort to "highlight" six important elements of the Chappell Comprehensive Planning process. These elements include Community Image, Land Use Development, Housing, Public Facilities, Services and Transportation, and Plan Maintenance and Implementation.
The following represent general Community Goals for Chappell:

1. Strive to improve the quality of life and sense of community for all residents of Chappell.

2. Foster the value of family in Chappell. Encourage the development of local action to preserve and strengthen families.

3. Implement appropriate community and economic developments to both stabilize and increase the population base of Chappell. With an expected population increase during the next 10-years, up to 26 additional housing units will be needed in Chappell.

4. Provide all residents with access to a variety of safe, decent, sanitary housing types, including options for the elderly and persons with disabilities.

5. Stabilize and broaden the economic base in Chappell to create and expand local employment opportunities.

7. Maintain a modern utility system. Future public facilities, services and transportation systems will need to be both updated and expanded during the planning period.

8. Continue the process to review and update the City’s Land Use Plan and Zoning and Subdivision Regulations, as needed.

9. Coordinate affordable access to alternative energy sources: Wind, Solar, Geothermal, Hydropower and Methane to assist home and business owners to utilize Net Metering to generate their own electricity and potentially sell extra generated power back to the utility provider.

10. Include community participation in the (ongoing) update of the Chappell Comprehensive Plan.
COMMUNITY IMAGE

Goal 1

Establish Community initiatives supportive of population growth and improved economic conditions in Chappell.

Policy 1.1

Strive to continue the anticipated 1 percent population increase in Chappell by 2023.

Action Strategy 1.1.1
Encourage an ongoing forum for citizen participation to build consensus for local action associated with improved economic and social conditions in Chappell.

Action Strategy 1.1.2
Plan and implement programs to encourage the retention of high school graduates and recruitment of alumni, especially with young children, to move back to the Community.

Action Strategy 1.1.3
Combine housing development opportunities with job creation and retirement activities, in the Chappell area.

Action Strategy 1.1.4
Strive to attract seniors living in rural Deuel, southern Garden, eastern Cheyenne Counties, Nebraska and Sedgwick County Colorado.

Action Strategy 1.1.5
Promote Chappell as a great place to live, work, raise a family and retire.

Policy 1.2

Improve and beautify the built environment in Chappell.

Action Strategy 1.2.1
Remove or repair dilapidated and unsightly buildings. Promote infill development of new dwellings on vacant lots in existing residential areas.

Action Strategy 1.2.2
Promote the planting of landscaping and the maintenance and preservation of trees. Emphasis should be placed along 2nd Street (Highway 30) and Babcock Avenue, the primary north/south street that also connects the City to the Interstate 80 Corridor.

Action Strategy 1.2.3
Improve streetscapes in Chappell. Focus on the east and west "gateway entrances" to the community, as well as connections to the Downtown (2nd Street and Babcock Avenue).
GOALS, POLICIES & ACTION STRATEGIES.

Action Strategy 1.2.4
Continue to promote opportunities utilizing Tax Increment Financing (TIF) by the implementation of a Redevelopment Area in Downtown Chappell. Once completed, TIF can provide incentives to encourage property owners to plant greenery, landscaping, and complete facade restoration and overall property improvements.

Goal 2
Secure resources for the future betterment of Chappell.

Policy 2.1
Create and implement a program of securing both public and private funding to finance improved living conditions in Chappell.

Action Strategy 2.1.1
Support and develop public/private partnerships for the development and redevelopment of residential, commercial and industrial areas in Chappell.

Action Strategy 2.1.2
Maintain a program or process of actively pursuing federal, state and local funds, to preserve and improve the community.

Action Strategy 2.2.3
Replace dilapidated dwellings with duplexes and four-plexes to provide a variety of living options for persons and families in Chappell.

Action Strategy 2.2.4
Utilize programs such as tax increment financing, CDBG programs and the local tax base to further enhance the community and maintain existing and attract new businesses.

LAND USE & DEVELOPMENT

Goal 1
Adopt a land use plan capable of fulfilling the residential, recreational, social, shopping and employment needs of the Chappell community citizenry through the year 2023.

Policy 1.1
Maximize the existing land areas presently served by municipal infrastructure.

Action Strategy 1.1.1
Increase land use density in residential areas having redevelopment potential.

Action Strategy 1.1.2
Conduct infill residential development activities, as well as utilization of the designated portions within the City Corporate Limits. Priority should be given to lots which have access to existing water, sanitary sewer, storm sewer, streets and sidewalks to reduce the cost of new housing construction.
**GOALS, POLICIES & ACTION STRATEGIES.**

**SECTION 2**

**Action Strategy 1.1.3**
Locate future higher density residential developments in close proximity to the Downtown area.

**Policy 1.2**
Designate future commercial and industrial land areas that are compatible with neighboring land uses, while optimizing the Community's ability to expand existing and attract new business types.

**Action Strategy 1.2.1**
Commercial uses should primarily remain in Downtown Chappell, while highway oriented commercial businesses should be directed to the Highway 30 (2nd Street) Corridor.

**Action Strategy 1.2.2**
Future industrial areas should be located along the railroad corridor within Chappell and beyond the southwestern Corporate Limits, south of the Union Pacific Railroad Corridor.

**Policy 1.3**
Continue to enforce and update proper land use development ordinances and regulations in Chappell.

**Action Strategy 1.3.1**
Maintain and update, as needed, zoning and subdivision regulations and appropriate building codes which comply with the land use plan of the City.

**Goal 2**
Continue to update a land use plan supportive of redevelopment efforts in Chappell.

**Policy 2.1**
Prioritize redevelopment efforts to address areas of greatest need for renovation and restoration.

**Action Strategy 2.1.1**
Areas with greatest redevelopment needs in Chappell include the Downtown and adjacent older residential areas generally south of 3rd Street and west of Dana Avenue.

**Action Strategy 2.1.2**
A Redevelopment Area should be established to utilizing Tax Increment Financing as an incentive to retain existing businesses, attract new businesses and industries and to make needed public improvements.

**Policy 2.2**
Create programs of redevelopment that combine selected residential uses with commercial land uses.

**Action Strategy 2.2.1**
Establish mixed land uses in the Downtown which promote general commercial, service, public and possible residential activities.

**Action Strategy 2.2.2**
Future land use patterns in the Downtown should include commercial and public uses.
GOALS, POLICIES & ACTION STRATEGIES.

SECTION 2

Goal 3
Maintain a land use plan that encourages the preservation and protection of environmental resources.

❖ Policy 3.1
Future development should be encouraged to locate in areas that are free of environmental problems related to ground and surface water features, soil and topographic slope.

Action Strategy 3.1.1
All future development and redevelopment activities should strive to eliminate any existing occurrences of deteriorating or dilapidated buildings.

Action Strategy 3.1.2
Future development and redevelopment activities should be supported by a modern infrastructure system consisting of an appropriate water source and distribution, sanitary sewer collection, storm sewer collection, and electrical and natural gas system.

Action Strategy 3.1.3
All new development and redevelopment activities should include a safe and sanitary environment, free of air, water and noise pollution.

Action Strategy 3.1.4
Preserve unique sensitive natural areas within the Planning Jurisdiction of Chappell from adverse development. Areas associated with Lodgepole Creek and its tributaries and Chappell Lake environs have sensitive soils and shallow depths to the ground water table.

HOUSING

Goal 1
Provide all Chappell residents with access to a variety of safe, affordable and sanitary housing types.

❖ Policy 1.1
Establish a plan of action for the development of residential options for residents of all ages and income levels.

Action Strategy 1.1.1
Develop up to 26 units of housing in Chappell during the next 10 years. This can include the development of 14 owner and 12 rental housing units. A total of five rental and nine owner units should be designated for workforce employees and their families.
Action Strategy 1.1.2
Plan housing for a) new households, b) the replacement of up to 20 percent of substandard housing units and c) affordable units for local households with a housing cost burden status.

Action Strategy 1.1.3
Provide additional housing in Chappell to eliminate the "pent-up" demand for housing for the current citizens of the community, with emphasis on senior households.

Action Strategy 1.1.4
Develop housing rehabilitation programs and projects to improve the overall condition of housing in the community.

Action Strategy 1.1.5
Provide housing for special populations, including both owner and rental options for persons with a disability. Participate in the state-wide "home modification" program for persons with disabilities and the elderly.

Action Strategy 1.1.6
Actively pursue affordable housing programs available from local, state and federal agencies/departments.

Action Strategy 1.1.7
Maintain a minimum community housing vacancy rate of 6 percent for modern, marketable housing stock.

Action Strategy 1.1.8
Encourage future residential development which is compatible with and complements existing neighborhoods.

Policy 1.2
Protect and preserve both existing and future neighborhoods through the implementation of programs and policies supporting best building practices.

Action Strategy 1.2.1
Rehabilitate up to 70 housing units in Chappell, by 2023. Up to 43 of the total 70 units should be designated for "moderate" rehabilitation, while the remaining 27 units should include "substantial" rehabilitation.

Action Strategy 1.2.2
Remove and replace up to 21 units of housing that are dilapidated, by 2023.

Action Strategy 1.2.3
Promote maximum energy efficient housing standards and provide incentives for implementation.

Action Strategy 1.2.4
All new residential development should be served by a modern municipal utility system.
Goal 2

Coordinate housing programs with economic development efforts and available public and private funding sources.

- **Policy 2.1**
  Mobilize local public and private resources and organizations to assist in the promotion and development of housing opportunities.

**Action Strategy 2.1.1**
Utilize the *Chappell, Nebraska Community Housing Study* for guidance in assessing affordable housing funding sources for the development of low-to moderate-income persons and families in Chappell.

**Action Strategy 2.1.2**
Work with *Panhandle Area Development District* and *Community action Partnership of Western Nebraska* to fund and implement both new housing and housing rehabilitation programs in Chappell.

**Action Strategy 2.1.3**
Secure grants / financial assistance to develop both owner and renter housing rehabilitation/repair programs for low- to moderate-income households to upgrade their homes to minimum housing quality standards.

**Action Strategy 2.1.4**
Support and utilize the State of Nebraska Consolidated Housing Plan to create affordable housing opportunities in Chappell.

**Action Strategy 2.1.5**
Promote housing opportunities in close proximity to the Downtown area, by replacing structures identified as substantially deteriorated.

**Action Strategy 2.1.6**
Continue to enforce regulations which encourage development of affordable housing.

**Action Strategy 2.1.7**
Focus on the development of single family and duplex dwellings for both owner and renter occupancy. Associated with this is securing builder-contractors to serve Chappell’s housing needs.

**Action Strategy 2.1.8**
Residential growth areas are identified in the Land Use Plan to the north, east and southeast of the current Corporate Limits. Local, State and Federal incentives and funding sources should be used in combination to entice new residents to Chappell. Community Development Block Grants, First-Time home-Buyer Programs, Credit- or Lease-To-Own Housing Program, HOME funds must be used in creative combinations to attract new residents to the Community.
GOALS, POLICIES & ACTION STRATEGIES.

PUBLIC FACILITIES, INFRASTRUCTURE AND TRANSPORTATION

Goal 1
Maintain and improve the existing public facilities and services in Chappell, and develop, as needed, new facilities and services to reflect the community's needs and demands.

Policy 1.1
Provide public services in an efficient and economic manner in Chappell to protect and enhance the safety and welfare of all residents. Address needed health, educational and supportive services.

Action Strategy 1.1.1
Insure public services are maintained and improved to keep pace with population growth.

Action Strategy 1.1.2
Provide adequate law enforcement and fire protection services, with increased emphasis on community relations as well as adequate civil defense and emergency service. Insure facilities necessary to support such services are available throughout the Community.

Action Strategy 1.1.3
Promote the coordination of these services among the various governmental and quasi-governmental entities. Chappell currently utilizes the law enforcement services of Deuel County.

Policy 1.2
Preserve and expand existing parks and open spaces throughout the community to enhance recreational opportunities in Chappell.

Action Strategy 1.2.1
Provide and improve recreation programs for youth, elderly, persons with disabilities and families.

Action Strategy 1.2.2
Chappell parks are used by both the Community residents and visitors. Continue and improve maintenance efforts to reinforce a positive community image.

Policy 1.3
Maintain the provision of facilities and services necessary to prevent pollution of the environment. Provide sewage treatment, refuse collection and disposal, street cleaning, flood control and similar environmental control processes.

Action Strategy 1.3.1
Provide adequate, efficient and appropriate utilities and services throughout the community of Chappell to existing and future residential, recreational, commercial and industrial areas.
GOALS, POLICIES & ACTION STRATEGIES.

SECTION 2

Chappell, Nebraska Comprehensive Plan-Update - 2023

Action Strategy 1.3.2
Maintain an adequate supply of potable water and an expanded distribution system suitable for present and future consumption and fire protection within Chappell.

Action Strategy 1.3.3
Educate the general public on solid waste management and the recycling of materials.

Action Strategy 1.3.4
Coordinate future growth areas with the land use plan to target the portions of the Community ideally suited for development where all appropriate infrastructure can be extended in a cost effective manner.

Policy 1.4
Analyze the energy uses of the City of Chappell by sector of residential, commercial, industrial and public/quasi-public use to determine the feasibility of utilizing alternative energy sources.

Action Strategy 1.4.1
Promote the use of existing low interest loans available through the Nebraska Energy Office to finance affordable alternative energy programs including Wind, Solar, Geothermal, Hydropower and/or Methane Systems to reduce or eliminate residents and businesses electrical utility costs.

Action Strategy 1.4.2
Encourage the development alternative energy sources on rooftops of commercial and industrial businesses, or residential commons areas. Combined ownerships of alternative energy systems could make these new technologies more affordable.

Action Strategy 1.4.3
Examine the potential of combining private and public sources of funding, such as Tax Increment Financing with State and Federal incentive programs to reduce the cost of energy to all persons and businesses of the City.

Goal 2

Provide a transportation system throughout Chappell for the safe and efficient movement of people, goods and services.

Policy 2.1

Maintain and adopt a coordinated plan for maintenance, improvement and future location of all streets, roads, and highways in the community, including paving, curbs, gutters, street lighting, curb cuts, replacements, etc.

Action Strategy 2.1.1
Maintain design standards and policies for various classes of streets, roads and highways to enhance the function and safety of the roadway and street system in Chappell.
GOALS, POLICIES & ACTION STRATEGIES.

SECTION 2

Chappell, Nebraska Comprehensive Plan-Update - 2023

Goal 1

Utilize the Chappell Comprehensive Plan as a Community and Economic Development Resource and Guide.

Action Strategy 2.1.2
Continue efforts to implement and maintain hard surfaces on all streets within the corporate limits of Chappell. A combination of Community Development Block Grants, TIF and various other sources of public and private monies should be combined to increase the development potential of existing neighborhoods.

Action Strategy 2.1.3
Prioritize gravel surfaced streets, such as North Ochs and Matlock Avenues and portions of 5th and 6th Streets, for street improvement projects.

Action Strategy 2.1.4
New residential developments in Chappell should have appropriate and adequate streets, curbs, gutters and sidewalks.

Action Strategy 2.1.5
Maintain and improve the City storm drainage system.

COMMUNITY & ECONOMIC DEVELOPMENT

Policy 1.1
Maximize economic opportunities for all residents by fostering increased employment and business types in Chappell.

Action Strategy 1.1.1
Create up to 75 new jobs in the Chappell area by 2023.

Action Strategy 1.1.2
Focus recruitment efforts to attract new companies that diversify employment opportunities in Chappell.

Action Strategy 1.1.3
Create a business stewardship program to insure the continuation of well established businesses in Chappell.

Action Strategy 1.1.4
Provide incentives to encourage former residents of the Community to relocate back to Chappell to start their own businesses. This will provide a broader selection of services and employment options to the citizens of the City.

Action Strategy 1.1.5
Utilize local technical and financial resources to assist existing and future businesses and industries to maintain employment, develop and grow.
GOALS, POLICIES & ACTION STRATEGIES.

Section 2

Chappell, Nebraska Comprehensive Plan - Update - 2023

Action Strategy 1.1.6
Continue and improve working relationships with regional and State organizations/agencies, to promote economic development in Chappell.

Action Strategy 1.1.7
Encourage the development of industries that will utilize local grown agricultural resources.

Action Strategy 1.1.8
Promote the existence and development of industrial businesses that are "light manufacturing" in nature, and/or do not produce products and pollutants detrimental to the health, safety and welfare of the Community.

Action Strategy 1.1.9
Provide infrastructure and needed amenities to support future growth of commercial, industrial and residential tracts.

Action Strategy 1.1.10
Utilize Federal, State and Local governmental incentives to recruit and retain job opportunities.

Goal 2

Community and economic development practices should strive to both stabilize and improve the Chappell economy.

Policy 2.1
Proper renovation, adaptive reuse and additions to public, commercial and industrial structures, as well as new construction activities should be policy in Chappell.

Action Strategy 1.2.1
Encourage local reinvestment in Chappell by both the private sector and the City.

Action Strategy 1.2.2
Encourage the revitalization or removal of vacant and substantially deteriorated commercial and industrial buildings in Chappell.

Action Strategy 1.2.3
Enhance the attractiveness of the business and industrial areas in Chappell through revitalization and beautification efforts.

Action Strategy 1.2.4
Expand shopping facilities to provide opportunities to attract non-local businesses.

Action Strategy 1.2.5
Promote the existence and development of commercial/business types that will maximize the opportunity for job creation and future job quantity and quality.

Action Strategy 1.2.6
Utilize the potential of the Chappell “SUCCEED” plan, Chappell Economic Development, Nebraska Community Foundation, a future Community Development Agency or Redevelopment Authority, Creek Valley School Foundation, State and local government, Municipal Energy Agency of Nebraska and financial assistance in securing new economic development activities.
Action Strategy 1.2.7
Utilize local, state and federal funding sources to strengthen existing businesses and assist in the creation of new business/industry, including the use of TIF.

PLAN MAINTENANCE & IMPLEMENTATION

Goal 1
Maintain a current and modern comprehensive plan and regulatory ordinances.

- Policy 1.1
Update the Chappell Comprehensive Plan annually.

Action Strategy 1.1.1
Establish an annual review process of the Comprehensive Plan and associated zoning and subdivision regulations. Elected officials and local governmental volunteers and community and economic development groups should be involved in this review.
SECTION 3
Population, Income & Economic Profile.
INTRODUCTION

Population and economic trends in the City of Chappell and the respective Planning Jurisdiction serve as valuable indicators of future development needs and patterns for the Community and provide a basis for the realistic projection of the future population.

The population trends and projections for the years 2000 through 2023 were studied and forecasted for Chappell, utilizing a process of both trend analysis and popular consent among the Chappell citizenry. Chappell is projected to increase, slightly, in population during the next 10 years. To maintain a stable population base, the City of Chappell will need to develop existing land within the Corporate Limits, while developing land adjacent the City for future annexation. This population goal would also require the creation of additional housing stock and related public features and utilities for the City.

The recently completed Chappell Community Housing Study identifies the future housing needs and desires of the Community. The Housing Study identifies an expected need for up to 26 housing units, including 14 owner and 12 rental units, during the next 10 years. An additional five owner and three rental units should be developed in the Chappell Effective Market Area, for a total of 34 newly-constructed housing units for the Chappell area. The Study provides a “10-Year Housing Action Plan” for completing housing projects deemed most needed by the local citizens of Chappell.
GENERAL POPULATION TRENDS AND PROJECTIONS

The analysis and projection of population are at the center of all planning decisions. This process assists in the understanding of important changes which have and will occur throughout the planning period. Estimating population size is critical to a community planning process. Further, projecting the population of a community is extremely complex. Because projections are based upon various assumptions about the future, projections must be carefully analyzed and continually reevaluated, due to the changing economic and social structure of a community.

POPULATION

- Table 3.1 identifies population trends and projections for the City of Chappell, Nebraska. Chappell had a 2012 Census population estimate of 943. The current (2013) population for Chappell is estimated to be 944.

- The population of Chappell is projected to increase, slightly, by nine, or approximately 1 percent, to 953 by 2023, representing a “Medium” population projection for the Community. The Community has the potential to further the increase in population, through increased housing development and rehabilitation activities, to 969. This would represent a 10-year increase of 25 persons, or 2.6 percent.
### TABLE 3.1
POPULATION TRENDS AND PROJECTIONS
CHAPPELL / DEUEL COUNTY, NEBRASKA
2000-2023

<table>
<thead>
<tr>
<th></th>
<th>Year</th>
<th>Population</th>
<th>Change</th>
<th>Percent</th>
<th>Change</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chappell:</td>
<td>2000</td>
<td>983</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>2010</td>
<td>929</td>
<td>-54</td>
<td>-5.5%</td>
<td>-5.4</td>
<td>-0.5%</td>
</tr>
<tr>
<td></td>
<td>2013</td>
<td>944</td>
<td>+15</td>
<td>+1.6%</td>
<td>+5</td>
<td>+0.5%</td>
</tr>
<tr>
<td></td>
<td>Low</td>
<td>2023</td>
<td>933</td>
<td>-11</td>
<td>-1.2%</td>
<td>+0.1%</td>
</tr>
<tr>
<td></td>
<td>Medium</td>
<td>2023</td>
<td>953</td>
<td>+9</td>
<td>+0.9%</td>
<td>+0.1%</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>2023</td>
<td>969</td>
<td>+25</td>
<td>+2.6%</td>
<td>+0.3%</td>
</tr>
<tr>
<td></td>
<td>Deuel County:</td>
<td>2000</td>
<td>2,098</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>2010</td>
<td>1,941</td>
<td>-157</td>
<td>-7.5%</td>
<td>-15.7</td>
<td>-0.8%</td>
</tr>
<tr>
<td></td>
<td>2013</td>
<td>1,973</td>
<td>+32</td>
<td>+1.6%</td>
<td>+10.6</td>
<td>+0.5%</td>
</tr>
<tr>
<td></td>
<td>2023</td>
<td>1,989</td>
<td>+16</td>
<td>+0.8%</td>
<td>+1.6</td>
<td>+0.08%</td>
</tr>
</tbody>
</table>

NOTE: 2012 Census Population Estimate: Chappell, 943; Deuel County, 1,972.
AGE DISTRIBUTION

- For planning purposes, the various cohorts of population are important indicators of the special needs of a community. The cohorts of age, sex and family structure can assist in determining potential labor force and the need for housing, public facilities and other important local services.

An analysis of age characteristics can be used to identify the potential need for public school, recreational areas and short- and long-term health care facilities.

- **Table 3.2** provides age distribution for the City of Chappell, from 2000 to 2023. The “55 to 64” age group experienced the largest increase in population from 2000 to 2010, 16 persons, from 92 to 108. The “65 to 74” and “85+” age groups are projected to experience the largest population increase in Chappell by 2023.

The current median age in Chappell is estimated to be 48.2 years, a slight increase from the 2010 median age of 47.7. The median age is projected to continue increasing, through 2023, to an estimated 50.9 years.

**TABLE 3.2**
POPULATION AGE DISTRIBUTION TRENDS AND PROJECTIONS CHAPPELL, NEBRASKA 2000-2023

<table>
<thead>
<tr>
<th>Age Group</th>
<th>2000</th>
<th>2010</th>
<th>Change</th>
<th>2013</th>
<th>2023</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>19 and Under</td>
<td>247</td>
<td>234</td>
<td>-13</td>
<td>233</td>
<td>221</td>
<td>-12</td>
</tr>
<tr>
<td>20-34</td>
<td>120</td>
<td>87</td>
<td>-33</td>
<td>79</td>
<td>54</td>
<td>-25</td>
</tr>
<tr>
<td>35-54</td>
<td>271</td>
<td>250</td>
<td>-21</td>
<td>242</td>
<td>249</td>
<td>+7</td>
</tr>
<tr>
<td>55-64</td>
<td>106</td>
<td>124</td>
<td>+18</td>
<td>137</td>
<td>148</td>
<td>+11</td>
</tr>
<tr>
<td>65-74</td>
<td>92</td>
<td>108</td>
<td>+16</td>
<td>120</td>
<td>132</td>
<td>+12</td>
</tr>
<tr>
<td>75-84</td>
<td>103</td>
<td>74</td>
<td>-29</td>
<td>75</td>
<td>79</td>
<td>+4</td>
</tr>
<tr>
<td>85+</td>
<td>44</td>
<td>52</td>
<td>+8</td>
<td>58</td>
<td>70</td>
<td>+12</td>
</tr>
<tr>
<td>Totals</td>
<td>983</td>
<td>929</td>
<td>-54</td>
<td>944</td>
<td>953</td>
<td>+9</td>
</tr>
<tr>
<td>Median Age</td>
<td>43.4</td>
<td>47.7</td>
<td>+4.3</td>
<td>48.2</td>
<td>50.9</td>
<td>+2.7</td>
</tr>
</tbody>
</table>

HOUSEHOLD CHARACTERISTICS

- **Table 3.3** identifies **specific household characteristics** of the City of Chappell, from 2000 to 2023. The number of households, or occupied housing units decreased in Chappell between 2000 and 2010, from 437 to 412; a loss of 25.

- Currently, Chappell consists of an estimated 421 households, 325 owner and 96 renter. **Owner households are estimated to increase by two, while renter households are projected to increase by three by 2023.** This will equal an estimated 327 owner and 99 renter households.

- Group quarters consist of living quarters that are not considered a household, such as dormitories, nursing care centers and correctional facilities. Currently, there are an estimated 22 persons residing in group quarters (nursing home residents) in Chappell.

#### TABLE 3.3
**SPECIFIC HOUSEHOLD CHARACTERISTICS**
**CHAPPELL / DEUEL COUNTY, NEBRASKA**
**2000-2023**

<table>
<thead>
<tr>
<th>Year</th>
<th>Population</th>
<th>Group Quarters</th>
<th>Persons in Households</th>
<th>Households</th>
<th>Persons Per Household</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chappell:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2000</td>
<td>983</td>
<td>23</td>
<td>960</td>
<td>437</td>
<td>2.20</td>
</tr>
<tr>
<td>2010</td>
<td>929</td>
<td>22</td>
<td>907</td>
<td>412</td>
<td>2.20</td>
</tr>
<tr>
<td>2013</td>
<td>944</td>
<td>22</td>
<td>922</td>
<td>421</td>
<td>2.19</td>
</tr>
<tr>
<td>2023</td>
<td>953</td>
<td>19</td>
<td>934</td>
<td>426</td>
<td>2.19</td>
</tr>
<tr>
<td>Deuel County:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2000</td>
<td>2,098</td>
<td>23</td>
<td>2,075</td>
<td>908</td>
<td>2.29</td>
</tr>
<tr>
<td>2010</td>
<td>1,941</td>
<td>22</td>
<td>1,919</td>
<td>867</td>
<td>2.21</td>
</tr>
<tr>
<td>2013</td>
<td>1,973</td>
<td>22</td>
<td>1,951</td>
<td>891</td>
<td>2.19</td>
</tr>
<tr>
<td>2023</td>
<td>1,989</td>
<td>19</td>
<td>1,970</td>
<td>912</td>
<td>2.16</td>
</tr>
</tbody>
</table>

INCOME TRENDS AND PROJECTIONS

HOUSEHOLD INCOME GROUPS

- **Table 3.4, page 3.7**, identifies **household income trends and projections** for Chappell, Nebraska, from 2000 to 2023. Household incomes in Chappell have increased in recent years and are projected to continue this trend through 2023. From 2000 to 2010, median income in Chappell increased from $35,000 to $38,440, or 9.8 percent. **Through 2023, the median income is projected to increase from the current estimate of $40,185 to $49,030, or 22.0 percent.** The number of households in Chappell having an annual income of at least $50,000 is projected to increase by an estimated 15 percent during the next 10 years.

- Median income of households 65+ years of age are projected to increase from the current amount of $34,377 to an estimated $39,402, representing a 14.6 percent increase.

SOCIAL SECURITY INCOME

- **Table 3.5, page 3.8**, identifies the number of **persons receiving Social Security Income (SSI) and/or Supplemental Security Income** in Deuel County. A total of 520 persons received Social Security Income in Deuel County, in 2011. Of this total, 78.8 percent, or 410 persons were retired workers.

PER-CAPITA INCOME

- **Table 3.6, page 3.10**, identifies **per capita income trends & projections** in Deuel County and the State of Nebraska, from 1999 to 2023. Current per capita income in Deuel County is an estimated $37,348. By 2023, per capita income in the County is projected to increase by an estimated 23.3 percent to $46,042.
<table>
<thead>
<tr>
<th>Income Group</th>
<th>2000*</th>
<th>2011*</th>
<th>2013</th>
<th>2023</th>
<th>% Change 2013-2023</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Households</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than $10,000</td>
<td>41</td>
<td>25</td>
<td>19</td>
<td>8</td>
<td>-57.8%</td>
</tr>
<tr>
<td>$10,000-$19,999</td>
<td>67</td>
<td>51</td>
<td>47</td>
<td>34</td>
<td>-27.6%</td>
</tr>
<tr>
<td>$20,000-$34,999</td>
<td>112</td>
<td>99</td>
<td>96</td>
<td>88</td>
<td>-8.3%</td>
</tr>
<tr>
<td>$35,000-$49,999</td>
<td>105</td>
<td>80</td>
<td>83</td>
<td>90</td>
<td>+8.4%</td>
</tr>
<tr>
<td>$50,000 or More</td>
<td>115</td>
<td>157</td>
<td>176</td>
<td>205</td>
<td>+16.5%</td>
</tr>
<tr>
<td>Totals</td>
<td>440</td>
<td>412</td>
<td>421</td>
<td>426</td>
<td>+1.2%</td>
</tr>
<tr>
<td>Median Income</td>
<td>$35,000</td>
<td>$38,440</td>
<td>$40,185</td>
<td>$49,030</td>
<td>+22.0%</td>
</tr>
<tr>
<td>Households 65+ Yrs.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than $10,000</td>
<td>28</td>
<td>17</td>
<td>12</td>
<td>6</td>
<td>-50.0%</td>
</tr>
<tr>
<td>$10,000-$19,999</td>
<td>26</td>
<td>21</td>
<td>19</td>
<td>12</td>
<td>-36.8%</td>
</tr>
<tr>
<td>$20,000-$34,999</td>
<td>29</td>
<td>30</td>
<td>31</td>
<td>34</td>
<td>+12.9%</td>
</tr>
<tr>
<td>$35,000-$49,999</td>
<td>45</td>
<td>40</td>
<td>38</td>
<td>39</td>
<td>+2.6%</td>
</tr>
<tr>
<td>$50,000 or More</td>
<td>29</td>
<td>56</td>
<td>68</td>
<td>86</td>
<td>+26.5%</td>
</tr>
<tr>
<td>Totals</td>
<td>157</td>
<td>164</td>
<td>168</td>
<td>177</td>
<td>+5.3%</td>
</tr>
<tr>
<td>Median Income</td>
<td>$30,488</td>
<td>$29,129</td>
<td>$34,377</td>
<td>$39,402</td>
<td>+14.6%</td>
</tr>
</tbody>
</table>

* Specified Data Used. 2011 estimate subject to margin of error.
### TABLE 3.5
**PERSONS RECEIVING SOCIAL SECURITY INCOME**
**DEUEL COUNTY, NEBRASKA**
**2011**

<table>
<thead>
<tr>
<th>Social Security Income-2011</th>
<th>Number of Beneficiaries</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Retirement Benefits</strong></td>
<td></td>
</tr>
<tr>
<td>Retired Workers</td>
<td>380</td>
</tr>
<tr>
<td>Wives &amp; Husbands</td>
<td>20</td>
</tr>
<tr>
<td>Children</td>
<td>0</td>
</tr>
<tr>
<td><strong>Survivor Benefits</strong></td>
<td></td>
</tr>
<tr>
<td>Widows &amp; Widowers</td>
<td>45</td>
</tr>
<tr>
<td>Children</td>
<td>25</td>
</tr>
<tr>
<td><strong>Disability Benefits</strong></td>
<td></td>
</tr>
<tr>
<td>Disabled Persons</td>
<td>45</td>
</tr>
<tr>
<td>Wives &amp; Husbands</td>
<td>0</td>
</tr>
<tr>
<td>Children</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>520</strong></td>
</tr>
</tbody>
</table>

| Aged 65 & Older             |                         |
| Men                         | 190                     |
| Women                       | 220                     |
| **Total**                   | **410**                 |

<table>
<thead>
<tr>
<th><strong>Supplemental Security Income-2011</strong></th>
<th><strong>Number of Beneficiaries</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Aged 65 or Older</td>
<td>N/A</td>
</tr>
<tr>
<td>Blind and Disabled</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>N/A</td>
</tr>
</tbody>
</table>

N/A=Not Available.

Source: Department of Health and Human Services.
Social Security Administration, 2013
### TABLE 3.6
PER CAPITA INCOME
DEUEL COUNTY, NEBRASKA / STATE OF NEBRASKA
2000-2023

<table>
<thead>
<tr>
<th>Year</th>
<th>Deuel County</th>
<th>State of Nebraska</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Per Capita Income</td>
<td>Percent Change</td>
</tr>
<tr>
<td>2000</td>
<td>$22,687</td>
<td>--</td>
</tr>
<tr>
<td>2001</td>
<td>$25,802</td>
<td>+13.7%</td>
</tr>
<tr>
<td>2002</td>
<td>$25,725</td>
<td>-0.3%</td>
</tr>
<tr>
<td>2003</td>
<td>$30,173</td>
<td>+17.3%</td>
</tr>
<tr>
<td>2004</td>
<td>$28,515</td>
<td>-5.5%</td>
</tr>
<tr>
<td>2005</td>
<td>$28,125</td>
<td>-1.4%</td>
</tr>
<tr>
<td>2006</td>
<td>$28,871</td>
<td>+2.6%</td>
</tr>
<tr>
<td>2007</td>
<td>$33,320</td>
<td>+15.4%</td>
</tr>
<tr>
<td>2008</td>
<td>$35,219</td>
<td>+5.7%</td>
</tr>
<tr>
<td>2009</td>
<td>$33,981</td>
<td>-3.5%</td>
</tr>
<tr>
<td>2013</td>
<td>$37,348</td>
<td>+9.9%</td>
</tr>
<tr>
<td>2000-2013</td>
<td>$22,687-$37,348</td>
<td>+64.6%</td>
</tr>
<tr>
<td>2013-2023</td>
<td>$37,348-$46,042</td>
<td>+23.3%</td>
</tr>
</tbody>
</table>

Source: Nebraska Department of Economic Development, 2013.
COST BURDENED HOUSEHOLDS

- **Tables 3.7, 3.8 and 3.9** identify *households with housing problems/cost burdened* in the City of Chappell, in 2000, 2011 and 2023. Cost burdened households are households that spend 30 percent or more of their income on housing costs. Housing costs include any cost directly attributable to the cost of living and may include rent, mortgage, insurance, taxes and utilities. Housing problems may include a lack of plumbing facilities or overcrowded housing conditions. Overcrowded housing conditions exist when more than 1.01 person per room exist in a housing unit.

- An estimated 50 owner households and 20 renter households in Chappell are currently cost burdened and/or have housing problems. **Households experiencing cost burden and/or housing problems are projected to decrease by 2023, with an estimated 38 owner and 15 renter households affected.**

- **A total of five elderly renter households are currently cost burden and/or experiencing housing problems in Chappell. This is projected to decrease to an estimated three households by 2023.**

- The 2007-2011 American Community Survey found **no homes in Chappell lacking complete plumbing**, and identified **four housing units with overcrowded conditions.**
### TABLE 3.7
**ESTIMATED OWNER HOUSEHOLDS BY INCOME COST BURDENED WITH HOUSING PROBLEMS**
**CHAPPELL, NEBRASKA 2000-2023**

<table>
<thead>
<tr>
<th>Income Range</th>
<th>2000*</th>
<th>2010*</th>
<th>2013</th>
<th>2023</th>
</tr>
</thead>
<tbody>
<tr>
<td># / #CB-HP</td>
<td># / #CB-HP</td>
<td># / #CB-HP</td>
<td># / #CB-HP</td>
<td># / #CB-HP</td>
</tr>
<tr>
<td>0%-30% AMI</td>
<td>22 / 18</td>
<td>14 / 11</td>
<td>12 / 7</td>
<td>6 / 3</td>
</tr>
<tr>
<td>31%-50% AMI</td>
<td>50 / 20</td>
<td>43 / 18</td>
<td>42 / 17</td>
<td>35 / 15</td>
</tr>
<tr>
<td>51%-80% AMI</td>
<td>64 / 20</td>
<td>62 / 16</td>
<td>63 / 15</td>
<td>67 / 12</td>
</tr>
<tr>
<td>81%+ AMI</td>
<td>249 / 12</td>
<td>203 / 10</td>
<td>208 / 9</td>
<td>219 / 8</td>
</tr>
<tr>
<td>Totals</td>
<td>385 / 70</td>
<td>322 / 55</td>
<td>325 / 50</td>
<td>327 / 38</td>
</tr>
</tbody>
</table>

# = Total Households  
#CB-HP = Households with Cost Burden – Housing Problems

*Specified Data Used.

Source: 2000 CHAS Tables.  

### TABLE 3.8
**ESTIMATED RENTER HOUSEHOLDS BY INCOME COST BURDENED WITH HOUSING PROBLEMS**
**CHAPPELL, NEBRASKA 2000-2023**

<table>
<thead>
<tr>
<th>Income Range</th>
<th>2000*</th>
<th>2010*</th>
<th>2013</th>
<th>2023</th>
</tr>
</thead>
<tbody>
<tr>
<td># / #CB-HP</td>
<td># / #CB-HP</td>
<td># / #CB-HP</td>
<td># / #CB-HP</td>
<td># / #CB-HP</td>
</tr>
<tr>
<td>0%-30% AMI</td>
<td>32 / 16</td>
<td>13 / 11</td>
<td>12 / 10</td>
<td>7 / 8</td>
</tr>
<tr>
<td>31%-50% AMI</td>
<td>40 / 12</td>
<td>22 / 10</td>
<td>20 / 10</td>
<td>16 / 7</td>
</tr>
<tr>
<td>51%-80% AMI</td>
<td>22 / 0</td>
<td>19 / 0</td>
<td>20 / 0</td>
<td>18 / 0</td>
</tr>
<tr>
<td>81%+ AMI</td>
<td>33 / 0</td>
<td>36 / 0</td>
<td>44 / 0</td>
<td>58 / 0</td>
</tr>
<tr>
<td>Totals</td>
<td>127 / 28</td>
<td>90 / 21</td>
<td>96 / 20</td>
<td>99 / 15</td>
</tr>
</tbody>
</table>

# = Total Households  
#CB-HP = Households with Cost Burden – Housing Problems

*Specified Data Used.

Source: 2000 CHAS Tables.  
### TABLE 3.9
ESTIMATED ELDERLY RENTER HOUSEHOLDS BY INCOME COST BURDENED WITH HOUSING PROBLEMS
CHAPPELL, NEBRASKA
2000-2023

<table>
<thead>
<tr>
<th>Income Range</th>
<th>2000*</th>
<th>2010*</th>
<th>2013</th>
<th>2023</th>
</tr>
</thead>
<tbody>
<tr>
<td># / #CB-HP</td>
<td># / #CB-HP</td>
<td># / #CB-HP</td>
<td># / #CB-HP</td>
<td># / #CB-HP</td>
</tr>
<tr>
<td>0%-30% AMI</td>
<td>16 / 8</td>
<td>11 / 5</td>
<td>8 / 5</td>
<td>3 / 3</td>
</tr>
<tr>
<td>31%-50% AMI</td>
<td>8 / 0</td>
<td>7 / 0</td>
<td>7 / 0</td>
<td>4 / 0</td>
</tr>
<tr>
<td>51%-80% AMI</td>
<td>0 / 0</td>
<td>1 / 0</td>
<td>1 / 0</td>
<td>2 / 0</td>
</tr>
<tr>
<td>81%+ AMI</td>
<td>8 / 0</td>
<td>9 / 0</td>
<td>10 / 0</td>
<td>12 / 0</td>
</tr>
<tr>
<td>Totals</td>
<td>32 / 8</td>
<td>28 / 5</td>
<td>26 / 5</td>
<td>21 / 3</td>
</tr>
</tbody>
</table>

# = Total Households  
#CB-HP = Households with Cost Burden – Housing Problems

*Specified Data Used.
Source: 2000 CHAS Tables.
EMPLOYMENT AND ECONOMIC TRENDS

The most recent and comprehensive employment data available for Chappell and Deuel County was obtained from the Nebraska Department of Labor. Since some of these figures are only available County-Wide, a review and analysis of Deuel County labor force statistics is also included to provide a general understanding of the economic activity occurring in and around the City of Chappell.

Overall, the economic outlook for Chappell is “good” for the planning period 2013 to 2023. Economic opportunities exist, primarily due to a stable population base in Chappell. Additional commercial and industrial business, as well as the expansion of value added agricultural businesses in the Chappell area, should be pursued if the Community desires more commerce. Existing local based business, agricultural-related industries, the City's close proximity to the Interstate 80 corridor will ensure Chappell has a stable economic base and a bright future for increased economic development.

CIVILIAN LABOR FORCE

❖ Table 3.10, page 3.14, identifies employment trends and projections in Deuel County, Nebraska, from 2002 to 2023. The unemployment rate in Deuel County ranged from 2.7 percent to 3.8 percent, between 2002 and 2012. During this period, the number of employed persons decreased by 67 in the County. Currently, an estimated 1,032 employed persons live in Deuel County resulting in an unemployment rate of 3.3 percent. By 2023, the number of employed persons is projected to increase by 34, or 3.3 percent, to 1,066.

WORKFORCE EMPLOYMENT BY TYPE

❖ Table 3.11, page 3.15, identifies work force employment by type in Deuel County, Nebraska, from 2010 to 2012. Between 2010 and 2012, Deuel County experienced an overall decrease of 6.5 percent in non-farm employed persons. The largest increases were experienced in the “State Government” sector, which increased by two employees, or 10.5 percent. The largest decline was evident in the “Federal Government” category, which declined by 14.3 percent, or by one person.
### TABLE 3.10
**EMPLOYMENT DATA TRENDS AND PROJECTIONS**
**DEUEL COUNTY, NEBRASKA**
**2000-2023**

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Employed Persons</th>
<th>Change</th>
<th>Percent Unemployment</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>1,094</td>
<td>--</td>
<td>2.7%</td>
</tr>
<tr>
<td>2003</td>
<td>1,141</td>
<td>+47</td>
<td>3.1%</td>
</tr>
<tr>
<td>2004</td>
<td>1,053</td>
<td>-88</td>
<td>3.0%</td>
</tr>
<tr>
<td>2005</td>
<td>1,055</td>
<td>+2</td>
<td>3.2%</td>
</tr>
<tr>
<td>2006</td>
<td>1,043</td>
<td>-12</td>
<td>2.7%</td>
</tr>
<tr>
<td>2007</td>
<td>1,023</td>
<td>-20</td>
<td>2.8%</td>
</tr>
<tr>
<td>2008</td>
<td>1,015</td>
<td>-8</td>
<td>3.1%</td>
</tr>
<tr>
<td>2009</td>
<td>1,019</td>
<td>+4</td>
<td>4.0%</td>
</tr>
<tr>
<td>2010</td>
<td>1,034</td>
<td>+15</td>
<td>3.8%</td>
</tr>
<tr>
<td>2011</td>
<td>1,035</td>
<td>+1</td>
<td>2.7%</td>
</tr>
<tr>
<td>2012*</td>
<td>1,027</td>
<td>-8</td>
<td>3.3%</td>
</tr>
<tr>
<td>2013</td>
<td>1,032</td>
<td>+5</td>
<td>3.3%</td>
</tr>
<tr>
<td>2023</td>
<td>1,066</td>
<td>+34</td>
<td>3.1%</td>
</tr>
<tr>
<td>2002-2023</td>
<td>1,094-1,066</td>
<td>-28</td>
<td>2.7%-3.1%</td>
</tr>
</tbody>
</table>

*Data available as of December, 2012.*

Source: Nebraska Department of Labor, Labor Market Information, 2013.
### TABLE 3.11
**WORKFORCE EMPLOYMENT BY TYPE**
**DEUEL COUNTY, NEBRASKA**
**2010-2012**

<table>
<thead>
<tr>
<th>Workforce</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>% Change 2010-2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Farm Employment (Wage &amp; Salary)</td>
<td>520</td>
<td>509</td>
<td>486</td>
<td>-6.5%</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>*</td>
<td>N/A</td>
</tr>
<tr>
<td>Goods-Producing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service-Providing</td>
<td>519</td>
<td>507</td>
<td>484</td>
<td>-6.7%</td>
</tr>
<tr>
<td>Trade, Trans, Ware, Util**</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Total Trade</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Wholesale Trade</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Retail Trade</td>
<td>63</td>
<td>64</td>
<td>62</td>
<td>-1.6%</td>
</tr>
<tr>
<td>Information</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Financial Activities</td>
<td>22</td>
<td>20</td>
<td>19</td>
<td>-13.6%</td>
</tr>
<tr>
<td>Professional &amp; Business</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Education &amp; Health</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Leisure &amp; Hospitality</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Other Services</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Total Government</td>
<td>199</td>
<td>207</td>
<td>207</td>
<td>+4.0%</td>
</tr>
<tr>
<td>Federal</td>
<td>7</td>
<td>6</td>
<td>6</td>
<td>-14.3%</td>
</tr>
<tr>
<td>State</td>
<td>19</td>
<td>19</td>
<td>21</td>
<td>+10.5%</td>
</tr>
<tr>
<td>Local</td>
<td>172</td>
<td>182</td>
<td>180</td>
<td>+4.6%</td>
</tr>
</tbody>
</table>

*Data not available due to disclosure suppression.
**Trade, Transportation, Warehousing & Utilities.
NA = NOT AVAILABLE.
Source: Nebraska Department of Labor, Labor Market Information, 2013.
SECTION 4
Land Use & Development.
SECTION 4
LAND USE & DEVELOPMENT.

INTRODUCTION

The Land Use and Development Section of this Comprehensive Plan-Update identifies development patterns that have occurred in Chappell since the town was surveyed in 1884. This land use component examines development opportunities, requirements and future utilization of land in and around the Community. A discussion of the environmental and physical characteristics of the Community of Chappell precedes a description and analyses of existing and future land use conditions in the City.

PROPER LAND USE PRACTICES

Proper land use practices can protect the natural resources of a community and be a complement to the built environment. The natural environment of the community provides both opportunities and constraints for existing and future developments.

As humans strive to create a sustainable living environment, they must work and live in harmony with their natural surroundings.

This can occur by designing with nature, conserving unique features, protecting watersheds and using sensitive development practices. In Chappell, the major development constraints and opportunities are:

(1) The Lodgepole Creek and associated floodplains to the south of the City that are prone to periodic flooding;

(2) Union Pacific Railroad Corridor, which runs southeast to northwest along the southern edge of the Downtown;

(3) The Deuel County Fairground west of Chappell that will limit future expansion of the Community.

IDENTIFICATION OF FUTURE GROWTH AREAS

Future land use should focus on the use of land in both the City and the Community’s One-Mile Planning Jurisdiction, during the 2013 to 2023 planning period. Special attention is given to the identification of future residential, public, parks/recreational, commercial and industrial growth areas. The identification of land uses within undeveloped areas of the Corporate Limits and into the Planning Jurisdiction is imperative for growth opportunities during the next 10 years.
LOCATION

The City of Chappell is located in the panhandle of Nebraska, in west-central Deuel County, along Highway 30 (2nd Street). Downtown Chappell is located approximately one mile north of the Interstate 80 Interchange. The Union Pacific Railroad Corridor runs northwest to southeast along the south side of Downtown. These transportation systems and geographic settings link Chappell to the Denver and Omaha metropolitan areas and beyond. The Highway and Railroad Corridors are considered to be vital to the future of the Community in terms of commerce and development.

HISTORICAL DEVELOPMENT

The Town of Chappell was platted in 1884, with the completion of the Union Pacific Railroad. The Community was named for a construction engineer, Charles Henry Chappell, and was incorporated in 1907. The Union Pacific Railroad was extended as a branch line from Julesburg, Colorado, northwesterly through Chappell along the Lodgepole Creek Corridor to Kimball and eventually to Cheyenne, Wyoming.

The geographic location of the City of Chappell placed it at the routes of pioneers (along the route of the Julesburg cut-off of the California Trail), the first trans-continental railroad (the Union Pacific), the first automobile cross-county route of the Lincoln Highway (Highway 30) and the route of Interstate 80, the first completed Interstate Highway between the east and west coasts.

POPULATION GROWTH

All of these events lead to the continued prosperity of the Community, serving as a center for regional commerce in the Deuel County area. The population of the City first appears in the U.S. Census in 1910 with 329 people and continued to grow until 1950 when Chappell reached its peak population of 1,297. The 2000 Census indicated the population declines since 1950 had stabilized with an increase of four persons to 983 people and generally has remained stable as of the 2010 Census when the City experienced a slight decline of 54 people to a total of 929 persons.

City Planning Commission members have worked to identify cost effective growth areas for the Community that will be beneficial during the 10-year planning period. The designation of residential, commercial, industrial growth areas is a top priority of this Comprehensive Plan.
THE NATURAL ENVIRONMENT

SOIL ASSOCIATIONS

The soils in and around the Community of Chappell are classified into three Soil Associations, with a broad range of characteristics. The U.S. Department of Agriculture, Natural Resources Conservation Service conducted the field soils survey and developed the boundaries of the soil types found in the Chappell One-Mile Planning Jurisdiction. The Soil Associations in Chappell are identified as the Dix-Altvan, the Las-Las Animas and the Cheyenne-Tripp Associations, as displayed in Illustration 4.1.

DIX-ALTVAN ASSOCIATION

The northern and southern portions of the One-Mile Planning Jurisdiction of the Chappell are comprised of the Dix-Altvan Association. The Association is described as “sloping, gravelly areas along Lodgepole Creek and its tributaries in the upper elevations.” (See Illustration 4.1)

The Dix-Altvan Association soils have “good to fair” bearing capacity and “low to moderate” limitations due to shrink swell potential that impacts the durability of the foundations of structures. These limitations can be overcome by strengthening of underground footings and foundation walls.\(^3\)

While all soils in this Association have a low shrink swell potential, the soils are rated as good to fair for bearing capacity to support foundations of structures. However, a shallow depth to the water table of 2’ to 5’ and the potential for flooding throughout the Association create severe limitations for sewer lagoons and septic tank filter fields.\(^2\)

CHEYENNE-TRIPP ASSOCIATION

A majority of the City and the central portion of the One-Mile Planning Jurisdiction are comprised of the Cheyenne-Tripp Association. The topography of this Association is described as “nearly level, well drained stream terraces that occur along Lodgepole Creek.” Nearly all rural lands associated with this Association are cultivated, with the majority of it irrigated. (See Illustration 4.2)

Limitations of this Association are a “fair to poor” bearing capacity that may require strengthening of the foundations of structures. Areas of steeper slopes are not suited for lagoons and filter fields.\(^1\)
SOILS ASSOCIATION MAP
CHAPPELL, NEBRASKA

LEGEND
1 DIX-ALTVAN ASSOCIATION
2 CHEYENNE-TRIP ASSOCIATION
3 LAS-LAS ANIMAS ASSOCIATION

WELLHEAD PROTECTION AREA
BOUNDARY

HANNA:KEELAN ASSOCIATES, P.C.
COMMUNITY PLANNING & RESEARCH
* Lincoln, Nebraska * 402.464.5383 *

ILLUSTRATION 4.2
WATERSHEDS

The topography and terrain of Chappell and the One-Mile Planning Jurisdiction are varied. The natural landscape has been formed by wind and water erosion and deposits creating areas of gently sloping uplands and sloped drainage ways. The topography of the One-Mile Planning Jurisdiction also has gently sloping uplands with shallower sloping valleys along drainage ways.

The Community’s protection against natural hazards is the responsibility of the local government and its elected officials. The natural surface water flow of Lodgepole Creek has sculpted the terrain, creating tributaries and drainage basins generally on an north/south axis. Surface drainage tends to flow southerly through the City and to Lodgepole Creek just south of the Union Pacific Railroad Corridor. Surface drainage does not pose a major threat to the built up areas of Chappell.

The Department of Housing and Urban Development, Federal Insurance Administration, rescinded the Flood Insurance Rate Map (FIRM) for the City of Chappell. The City should refer to the FIRM of Deuel County when areas are proposed for development along Lodgepole Creek.

WELLHEAD PROTECTION PROGRAM (WHP)

The Nebraska Department of Environmental Quality (NDEQ) regulates ground water quality and quantity. To assist local municipalities with protecting their municipal drinking water supply, the NDEQ has developed the Nebraska Wellhead Protection Program (WHP). The voluntary program “intends to prevent the contamination of ground water used by public water supply wells.”

The WHP provides the following in accordance with the federal laws: 1) duties of the governmental entities and utility districts, 2) determines protection areas, 3) identifies contamination sources, 4) develops contaminant source management programs, 5) develops alternate drinking water plans, 6) reviews contaminated sources in future wellhead areas, and 7) involves the public.

The Wellhead Protection Area is delineated by a time-of-travel cylindrical displacement calculation. The boundary is then mapped by NDEQ so communities can apply zoning regulations to the floating district. Four Municipal Wells are located within the incorporated area of Chappell, and one is located southeast of the City adjacent the Chappell Golf Course.
CLIMATE

The climate of the Chappell area has varying seasonal temperatures and rapidly changing weather patterns. The temperature ranges from an average daily minimum of 13.6 °F in January to a maximum of 92.2°F in July. The average annual precipitation in Chappell is 17.7". These climatic characteristics and fertile soils create an environment for a productive agricultural industry.

THE BUILT ENVIRONMENT

The built environment of Chappell is characterized by its districts, paths, edges, nodes and landmarks. The combination of these items creates a sense of place and image for the citizens of Chappell. The natural terrain enhances the built environment by providing a varying and aesthetic base for urban development.

The districts and neighborhoods are defined by their edges or boundaries. The major transportation corridors and the physical barriers of the terrain generally create the edge of each district with the paths, giving the neighborhoods distinct boundaries.

Designating the proper land use adjacent the Interstate 80 and the Highway 30 Corridors of Chappell is essential. The general trend is to guide highway commercial development in Downtown Chappell and when appropriate, adjacent the Highway 30 Corridor and the Interstate 80 Interchange. Industrial development is recommended to expand in place along the Union Pacific Railroad Corridor. The Community should take advantage of the development opportunities associated with each of these transportation corridors to achieve the land use goals and policies in this Plan.

LAND USE ANALYSIS

EXISTING LAND USE PROFILE

Existing Land Use in Chappell (incorporated area) is identified in Table 4.1 and Illustrations 4.3 and 4.4.
## TABLE 4.1
EXISTING LAND USE
CHAPPELL, NEBRASKA
2013

### 2013 ESTIMATED POPULATION –944
### 2023 ESTIMATED MEDIUM POPULATION –953
### 2023 ESTIMATED HIGH POPULATION – 969

<table>
<thead>
<tr>
<th>Land Use Type</th>
<th>2013 Existing Land Use Acreage</th>
<th>2013 Existing Land Use Percent</th>
<th>2013 ChapPELL Planning Standard (CPS)</th>
<th>2013 National Planning Standard (NPS)</th>
<th>2013 Total Acres Needed(CPS/NPS)</th>
<th>2023 Total Acres Needed(CPS/NPS)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parks/Recreation</td>
<td>13.6</td>
<td>3.3%</td>
<td>1.5</td>
<td>2.0</td>
<td>14.3 / 19.1</td>
<td>14.5 / 19.4</td>
</tr>
<tr>
<td>Public/Quasi-Public</td>
<td>20.4</td>
<td>5.0%</td>
<td>2.2</td>
<td>2.8</td>
<td>21.0 / 27.1</td>
<td>21.3 / 27.1</td>
</tr>
<tr>
<td>Residential:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single Family</td>
<td>102.4</td>
<td>25.1%</td>
<td>10.8</td>
<td>7.5</td>
<td>102.9 / 71.5</td>
<td>104.7 / 72.7</td>
</tr>
<tr>
<td>Multifamily</td>
<td>6.6</td>
<td>1.6%</td>
<td>0.7</td>
<td>2.0</td>
<td>6.7 / 19.1</td>
<td>6.8 / 19.4</td>
</tr>
<tr>
<td>Mobile Home</td>
<td>4.0</td>
<td>1.0%</td>
<td>0.4</td>
<td>0.5</td>
<td>3.8 / 4.8</td>
<td>3.9 / 4.9</td>
</tr>
<tr>
<td>Commercial</td>
<td>10.7</td>
<td>2.6%</td>
<td>1.2</td>
<td>2.4</td>
<td>11.4 / 22.9</td>
<td>11.6 / 23.3</td>
</tr>
<tr>
<td>Industrial</td>
<td>12.1</td>
<td>3.0%</td>
<td>1.3</td>
<td>2.3</td>
<td>12.4 / 21.9</td>
<td>12.6 / 22.3</td>
</tr>
<tr>
<td>Streets/Alleys &amp; R.R.</td>
<td>133.8</td>
<td>32.8%</td>
<td>14.2</td>
<td>9.0</td>
<td>135.3 / 85.8</td>
<td>137.6 / 87.2</td>
</tr>
<tr>
<td><strong>Total Developed</strong></td>
<td><strong>303.8</strong></td>
<td><strong>74.5%</strong></td>
<td><strong>32.3</strong></td>
<td><strong>28.5</strong></td>
<td><strong>307.8</strong> / <strong>271.6</strong></td>
<td><strong>310.0</strong> / <strong>276.2</strong></td>
</tr>
<tr>
<td>Total Vacant^^</td>
<td><strong>103.8</strong></td>
<td><strong>25.5%</strong></td>
<td><strong>11.0</strong></td>
<td><strong>6.5</strong></td>
<td><strong>104.8</strong> / <strong>62.0</strong></td>
<td><strong>106.6</strong> / <strong>63.0</strong></td>
</tr>
<tr>
<td>Developable</td>
<td><strong>62.3</strong></td>
<td><strong>60%</strong></td>
<td><strong>6.6</strong></td>
<td><strong>6.5</strong></td>
<td><strong>62.9</strong> / <strong>37.0</strong></td>
<td><strong>64.0</strong> / <strong>37.8</strong></td>
</tr>
<tr>
<td>Not Developable</td>
<td><strong>41.5</strong></td>
<td><strong>40%</strong></td>
<td><strong>4.4</strong></td>
<td><strong>NA</strong></td>
<td><strong>41.9</strong> / <strong>24.8</strong></td>
<td><strong>42.6</strong> / <strong>25.2</strong></td>
</tr>
<tr>
<td><strong>TOTAL CITY AREA</strong></td>
<td><strong>407.6</strong></td>
<td><strong>100.0%</strong></td>
<td><strong>43.3</strong></td>
<td><strong>35.0</strong></td>
<td><strong>412.6</strong> / <strong>333.6</strong></td>
<td><strong>416.6</strong> / <strong>339.2</strong></td>
</tr>
</tbody>
</table>

^Based on Net Area Acreage.

^^Estimated Current Vacant Land has the following Zoning Classification: Residential = 60%, Commercial = 10%, Industrial = 30%.

Note: Chappell and National Planning Standards identify number of acres per 100 persons.

**Vacant Land Capable of Development.

**Based on Medium Population Projection.

***Based on High Population Projection.

LAND USE & DEVELOPMENT

VACANT

Vacant land in Chappell equals an estimated 103.8 acres, or 25.5 percent of the total platted City. Vacant lands represent 11.0 acres per one hundred persons, which is approximately 69.2 percent more than the planning standard of 6.5. Nearly all of the vacant land within the Corporate Limits of Chappell, with the exception of the strip of land that extends the Corporate Limits to the Interstate 80 Interchange, has municipal utilities within close proximity to facilitate development.

PUBLIC/QUASI-PUBLIC

Public/Quasi-Public land acreage in Chappell totals an estimated 20.4 acres, or five percent of the total platted City area. This land classification includes the Chappell Community Building, Churches, the Community Center and various public buildings. This land use classification equals an estimated 2.2 acres per 100 people, about 21 percent less than the recommended Planning Standard of 2.8 acres.

PARKS/RECREATION

Lands associated with Parks and Recreation comprise approximately 13.6 acres of developed land in the City of Chappell, or 3.3 percent of the total developed land area. The total park area equates to approximately 1.5 acres of recreational land per 100 people and is 25 percent smaller than the recommended Planning Standard. However, Lake Chappell recreation area and the adjacent Chappell Golf Course are located outside of the Corporate Limits of the City and contain an estimated 155 acres of park lands.

RESIDENTIAL

Total Residential land usage consists of an estimated 113 acres, or 27.7 percent of the total platted area of Chappell. The 11.9 acres of residential land per 100 persons in Chappell is approximately 19 percent more the than the Planning Standard of 10 acres.

Single Family land usage calculates to an estimated 102.4 acres, or 25.1 percent of the total City developed area. This equals 11.1 acres per 100 people, 44 percent higher than the Planning Standard of 7.5 acres per 100 people.
EXISTING LAND USE MAP
CORPORATE LIMITS
CHAPPELL, NEBRASKA

ILLUSTRATION 4.3

HANNA:KEELAN ASSOCIATES, P.C.
COMMUNITY PLANNING & RESEARCH
* Lincoln, Nebraska * 402.464.5383 *

ILLUSTRATION 4.3

Chappell, Nebraska Comprehensive Plan-Update - 2023
Multifamily Housing equals an estimated 1.6 percent of the developed land within Chappell. The estimated 6.6 acres of multifamily development equals 0.7 acres per 100 persons. This total is 65 percent less than the recommended Planning Standard of 2 acres per 100 persons.

Mobile Homes comprise an estimated one percent of the land within Chappell. The estimated 4.0 acres of mobile home area equals 0.4 acres per 100 persons. This total is 20 percent less than the recommended Planning Standard of 0.5 acres per 100 persons.

COMMERCIAL

Commercial land usage in Chappell totals an estimated 10.7 acres, or approximately 2.6 percent of the Community’s land area. This amount, which equates to 1.2 acres per 100 people, is 50 percent less than the Planning Standard for commercial land area; 2.4 acres per 100 people.

INDUSTRIAL

Industrial Land Use consists of an estimated 12.1 acres within the Corporate Limits. The industrial acres per 100 people is 1.3, which is nearly 44 percent less than Planning Standard. Industrial uses outside of the Corporate Limits are not included in this analysis.

CONCLUSIONS

Chappell is challenged during the 10-year planning period to expand the amount of multifamily, commercial and industrial land uses. The above analysis indicates that each of these three categories are currently underserved in Chappell by the comparison of existing land uses in the Community to National Planning Standards. A lack of available rental housing options was identified by local citizens.

LAND USE COMPARISON

The Existing Land Use Analysis differs from the analysis completed as part of the 2002 Plan in one significant area. A tract of land connecting the Corporate Limits of the City to the Interstate 80 interchange and a two block area along the north side of the City, including the Hilltop Manor were annexed. These annexations increased the total incorporated area of Chappell by approximately 77.5 acres, the majority of which is vacant land.
Vacant lands designated for new residential development, within and adjacent the Corporate Limits, will require an extension of all utilities.

Housing projections through 2023 must be supported by accessing vacant lands within the Corporate Limits of Chappell and the growth areas adjacent the Corporate Limits. A vacant tract of land in the northeast portion of the City, platted as the Skyline Addition, did not fully developed.

- All necessary utility systems will need to be extended throughout the Skyline Addition to support development.
- Residential growth areas to the north, east and southeast require infrastructure to support development.

FUTURE LAND USE PROFILE

The City of Chappell has proposed a goal of implementing appropriate community and economic developments to stabilize the City’s declining population since its peak in 1950 of 1,297 persons. The latest U.S. Census published in 2010 indicates Chappell had experienced a slight population decline since 2000 by 54 persons, or to 929 total people. The 2012 Census Population Estimate recorded a population increase in Chappell, of 14 residents.

The Community Housing Study, a component of the Chappell Comprehensive Plan-Update identified a need for new housing construction to support current and future residents of Chappell. There is also an identified lack of available housing for workforce employees and their families. Participants in Housing Listening Sessions stated local employers such as the Chappell Public School District have difficulty hiring new teachers due to the lack of available housing in Town. Future land use for the entire City of Chappell, both the Community and Planning Jurisdiction, are identified in Illustrations 4.5 and 4.6.

INFILL DEVELOPMENTS

The strategic development of infill lots and other vacant land areas within the Corporate Limits would allow for managed growth and the utilization of the existing infrastructure.

This process is more readily available in the northeastern portion of Chappell. A large tract of vacant land exists that is platted as part of the Skyline Addition, which is currently undeveloped. Approximately 100 individual lots measuring 50’ x 140’ are included in this undeveloped subdivision.

The Chappell Community Housing Study identifies a need for an estimated 26 housing units to support the potential demand for housing throughout the 10-year planning period. This goal would require the construction of approximately three new houses or apartment units each year. This housing activity could spur the development of safe, decent and affordable housing in the Community.
FUTURE LAND USE MAP
PLANNING JURISDICTION
CHAPPELL, NEBRASKA

LEGEND
- VACANT/AGRICULTURE
- PUBLIC/QUASI-PUBLIC
- PARKS/RECREATION
- SINGLE FAMILY RESIDENTIAL
- COMMERCIAL
- INDUSTRIAL
- CORPORATE LIMITS
- ONE MILE JURISDICTION LINE

HANNA:KEELAN ASSOCIATES, P.C.
COMMUNITY PLANNING & RESEARCH
* Lincoln, Nebraska * 402.464.5383 *
ILLUSTRATION 4.6

Chappell, Nebraska Comprehensive Plan-Update - 2023
### PARKS AND RECREATION

The City of Chappell maintains approximately 14 acres of land designated for parks and recreation within the Corporate Limits of the City. This includes the recreation facilities of the Chappell Public School District. Equipment includes picnic shelters, playground equipment, the municipal pool and ball fields. The City of Chappell should consider additional park and recreation equipment in the existing parks, along with other recreation opportunities.

### PUBLIC/QUASI-PUBLIC

Future public/quasi-public land uses in Chappell will be primarily comprised of additional acreage to accommodate existing public/quasi-public uses. Existing land use configurations will occupy their present land area with proposed expansion to meet the service requirements of a growing community.

### RESIDENTIAL GROWTH AREAS

Future residential development in and around the City of Chappell should be of high priority to the Community during the planning period. The City currently exceeds the planning standard of 10 Acres of residential land per 100 people. Adequate land within the Community will accommodate future housing development.

The **Future Land Use Maps** identify newly designated residential areas in and around Chappell as low to medium density. These designations will allow developers the option of providing a variety of housing for families, singles, older adults and special populations. The following narrative provides a description of the future residential land use compositions for the Community.

**Single family** development should first occur in established residential areas, within the Corporate Limits of the City. Development and redevelopment efforts should focus on infill construction within the Community and the replacement of substantially deteriorated dwellings that are not cost effective to rehabilitate.

The development of future single family residential subdivisions, including the Skyline Addition, should be encouraged within the planned residential growth areas when vacant lands within the City is not available for purchase. Single family residential growth is planned to occur to the north, east and southeast of the City. The cost of development in these growth areas will be significantly more than on vacant lots located within existing Corporate Limits.

**Multifamily** development should be pursued during the planning period. Currently, Chappell maintains only 0.6 acres of multifamily residential development per 100 people, significantly less than the recommended Planning Standard of 2 acres per 100 people. The development of additional units in higher densities allows for more affordable housing and greater efficiency of resources. The **Future Land Use Maps** identify areas for development or redevelopment of multifamily housing. The highest priority is located in the northern portion of the City.
COMMERCIAL

Future commercial land use areas are anticipated to include the infill of vacant parcels existing within Downtown Chappell and, to a lesser extent, along Highway 30 (Second Street). Expansion of commercial areas, provided for in the Land Use Plan, include land along Highway 30, specifically between Thompson and Babcock Streets and at the Interstate 80 interchange. New highway commercial development could be used in combination with “gateway entrance” enhancements to Chappell along this transportation corridor.

INDUSTRIAL

Currently, Chappell has an estimated 12 acres of industrial land within the Corporate Limits. An additional 38 acres of industrial land is outside the Corporate Limits of Chappell to the southwest. If included with the industrial uses inside the community, Chappell would exceed the national planning standard for industrial land acres. To continue to provide jobs for the population base and support industry expansion, industrial growth areas are proposed along the south side of the Union Pacific Railroad Corridor, east and west of Downtown.

Local economic development groups, organizations and property owners are encouraged to promote and continue their support for additional industrial land development.

The Future Land Use Maps identify the proposed future industrial land areas adjacent existing industrial developments and the south side of the Union Pacific Railroad Corridor. Vacant tracts of land exist in the areas proposed for industrial development.

Illustration 4.6 identifies additional vacant/agricultural areas to be developed for industrial use, during the next 10 years. These areas will require an extension of appropriate infrastructure to facilitate future developments. The area would have access to the railroad and major Highway Corridors in Chappell to allow for the transportation of goods between the City and the Interstate 80 Corridor. Future industrial developments will also have the advantage of utilizing the Union Pacific Railroad Corridor to export products to neighboring Communities.

The current industrial lands within the Corporate Limits, are encouraged to remain as “light” industry. The reason is twofold: one, it creates a more compatible land use with adjacent commercial and residential properties; and two, it satisfies a need in the Community.

ANNEXATION

Future annexation in Chappell should occur in the non-agricultural land use districts identified in Illustration 4.5, Future Land Use Map. These tracts could be annexed at a point-in-time when in conformance with and meeting the criteria of the Nebraska State Statues that address annexation.

A certain amount of vacant land will also be needed in each district to provide an overall functional land use system. To develop the Community in the most efficient and orderly manner possible, the focus should be placed on the development of suitable vacant land and redevelopment of deteriorated structures or property within the Chappell Corporate Limits. Currently, an estimated 62 acres of vacant land within the Chappell Corporate Limits that is not impacted by the flood prone lands associated with Lodgepole Creek.
ENVIRONMENTAL ASSESSMENT

The Future Land Use Maps for Chappell represent the City’s Land Use Plan. The Plan should serve as a guide to the development of the City and its surrounding area. The Plan is not intended to dictate changes to the Community, but rather evaluate existing conditions and recognize ongoing changes. In addition, the Plan is designed to allow change to occur in an orderly manner which will ensure the best interests of Chappell will be achieved.

Before the implementation of this Land Use Plan, two steps should be undertaken. First, the possible effects of the Plan should be explored. Identification of the possible results of any action, program or policy and the determination of the intensity of the results will be the most significant factors ensuring successful Plan implementation, with a minimum of negative effects. Second, the positive impacts of a Plan must be weighed against the negative impacts resulting from implementation activities. Alternative strategies should be considered to select the implementation activities that achieve the most benefits with the least problems.

The following environmental assessment will review the basic scope of the Land Use Plan and then identify any significant environmental impacts, both social and physical, of the Plan’s proposed development and redevelopment actions. Precautionary measures will be noted, as well as unavoidable adverse effects. Actions which will lead to irreversible commitments of resources will be recognized as well as other long-term effects from immediate programs.

POTENTIAL ADVERSE IMPACTS

The Land Use Plan anticipates a continued growth and expansion Community-Wide, in response to the needs of a potential expanding local housing need: 26 additional housing units, by 2023. If the Community grows as hoped, nearly all land use activities envisioned will have the potential for some type of adverse impact to the natural environment.

Continued growth will require additional commitment of construction materials, financial resources, fossil fuels and land resources which represent deductions from the total reservoir of resources.

Additionally, continued economic and physical growth will mean the increased depletion of groundwater resources. Aside from the impacts possible from commitment of resources toward the realization of Community growth, there will also be a continuing requirement for resources necessary for operation and maintenance of existing homes, industries, businesses and utility systems.

Commitment of land resources, in many cases, will mean the conversion of agricultural land from the production of food and fiber to developed uses which also represent an adverse impact, but one which is basically unavoidable if the Community continues to prosper and grow. Among the by-products of continued Community growth, which will contribute to environmental degradation, are increased storm water runoff, additional amounts of air, water and noise pollution and increased vehicular traffic on local streets.

No potential adverse effects to the natural environment are expected during the planning period. None are expected to become especially significant due to the implementation of the Land Use Plan.
BENEFICIAL IMPACTS

The implementation of the Land Use Plan includes a potential for diverse and far-reaching beneficial impacts to both the man-made and natural environments during the planning period. One of the primary functions of the Plan will be to minimize negative impacts.

The overall effect of Plan implementation will be to either benefit the environment or lower the incidence and severity of adverse effects. Sound local development standards and zoning regulations will provide a significant beneficial influence towards partial mitigation of the potential for environmental damages due to continued land use development.

The most significant positive or beneficial environmental effects should be as follows:

- Recognition of local environmental characteristics;
- The encouragement of growth in areas contiguous to existing development and the maximum use of existing utilities and streets;
- The implementation of a coordinated and comprehensive housing initiative and development program will ensure the preservation of existing housing resources, combined with the provision of new housing units;
- The appropriate locating and provision of housing, commercial, educational, recreational and employment opportunities will act to positively reinforce the social structure of existing and future populations of the City;
- The provision of sufficient and efficient utility services will minimize the possible pollution associated with growth; and
- The proper mixing and separation of land uses and appropriate classification of the street system will minimize adverse effects of noise, odor, and air pollution.

The presence of land use or zoning regulations should continue to ensure an efficient and appropriate development pattern through density control to prevent overcrowding, prevention of mixing of incompatible land uses and prevention of further improper development in sensitive or hazardous natural areas, such as steep slope, floodplain areas and creeks or streams.

Illustrations 4.7 and 4.8 identify the Official Zoning Maps for the City of Chappell and the Planning Jurisdiction, as per the proposed Future Land Use Maps.

ALTERNATIVES

Within the full scope of possible actions, there are basically three alternatives. The first is to continue a planned approach to the future expansion of the Community.

A second alternative would be a more rigidly controlled and intensely monitored regulation which would essentially restrict a high percentage of anticipated future growth in Chappell. The third possible choice is a less intense regulation, which in terms of municipal planning, represents the "do nothing" alternative.
The last alternative has most often been typical of many Communities, large and small, and has often resulted in the maximum adverse impact to both the man-made and natural environments. The alternative of a more rigid control would avoid many of these potentially adverse impacts, but would be so restrictive as to hamper economic expansion, and thus, the ultimate growth and development of the entire Community of Chappell.

The most beneficial alternative is to guide future growth and expansion through a Land Use Plan, in combination with realistic land use control regulations. The Future Land Use Maps prepared for Chappell, coupled with the revisions to the existing Zoning Ordinance and Subdivision Regulations, will provide a means by which the Community may achieve proper development practices.

**ACTIONS TO MITIGATE ADVERSE ENVIRONMENTAL EFFECTS**

**Adverse impacts** resulting from continued growth and expansion of Chappell can be substantially mitigated through adoption and application of the land use regulations and design standards.

These measures will provide a positive influence for conservation and proper use of land, materials and energy. As such, these measures will help to mitigate the adverse impacts of development upon the allocation of resources.

The Land Use Plan recognizes the character of the natural environment and charts a course for future growth, which will allow maximum efficient use of available resources without serious permanent alteration or depletion.

The future development of the City of Chappell, as outlined in this Land Use Plan, is expected to provide a beneficial impact on the man-made environment with few, if any, adverse impacts upon natural environments.
OFFICIAL ZONING MAP
CORPORATE LIMITS
CHAPPELL, NEBRASKA

LEGEND
AGR Agricultural Residential District
R-1 Residential Single Family District
R-2 Residential Single and Multifamily District
R-3 Residential Mobile Home/Single and Multifamily District
C-1 General Commercial District
C-2 Highway Commercial District
I Industrial District

HANNA:KEELAN ASSOCIATES, P.C.
COMMUNITY PLANNING & RESEARCH
* Lincoln, Nebraska * 402.464.5383 *

ILLUSTRATION 4.7
OFFICIAL ZONING MAP
PLANNING JURISDICTION
CHAPPELL, NEBRASKA

LEGEND
AGR Agricultural Residential District
C-2 Highway Commercial District
I Industrial District

HANNA:KEELAN ASSOCIATES, P.C.
COMMUNITY PLANNING & RESEARCH
* Lincoln, Nebraska * 402.464.5383 *

ILLUSTRATION 4.8

2. Ibid., pp. 8, 10, 11 and Table 6 pp. 89 to 108.

3. Ibid., pp. 8, 10, 11.

4. Nebraska Wellhead Protection Program, Submittal to EPA Ground Water Section, Water Quality Division, Department of Environmental Control, State of Nebraska. P.1.

5. Ibid., pp 1-4.

6. Ibid., p. 4.

SECTION 5
Public Facilities, Utilities & Transportation.

HANNA:KEELAN ASSOCIATES, P.C.
COMMUNITY PLANNING & RESEARCH
SECTION 5
PUBLIC FACILITIES, INFRASTRUCTURE & TRANSPORTATION.

INTRODUCTION

Chapter 5 of this Comprehensive Plan discusses the existing conditions and planned future improvements to Chappell’s public facilities infrastructure and transportation. Public facilities are provided to insure the safety and well-being of the residents of Chappell. Public facilities provide citizens with social, cultural, educational, health care, law enforcement, fire protection and recreational facilities to meet the needs of the Community. Public infrastructure provides water, sanitary sewer, storm sewer and solid waste disposal for residents of Chappell. The location of public facilities throughout the City is depicted in Illustration 5.1.

PUBLIC FACILITIES

An integral part of the quality of life in a community is the parks and recreational system available to its residents and visitors. Recreational facilities play an important role in enhancing a city’s “quality of life.”

The role of the community in adequately planning for open space and providing a full range of recreational opportunities directly impacts the community and economic development activities.

❖ PARKS AND RECREATION

Creek Valley Public School Athletic Fields are located southeast of the intersection of Lincoln Avenue and 4th Street. This facility is comprised of the Creek Valley Schools football field and track, as well as the Buckley Legion Baseball Field and Little League Baseball Field. The entire facility consists of an estimated seven acres. The primary utilization of the facility is by the Creek Valley Public Schools.
PUBLIC FACILITIES, INFRASTRUCTURE & TRANSPORTATION.

PUBLIC FACILITIES MAP
CHAPPELL, NEBRASKA

ILLUSTRATION 5.1

HANNA-KEELAN ASSOCIATES, P.C.
COMMUNITY PLANNING & RESEARCH
* Lincoln, Nebraska * 402.464.5383 *

ILLUSTRATION 5.1
The **Pool Park** is located between Lincoln and Washington Streets, between 4th and 5th Streets. This full city block is comprised of an estimated two acres and includes playground equipment, picnic shelters, public restrooms and the Chappell Municipal Swimming Pool. The Pool is generally open between Memorial and Labor Day Holidays.

**Chappell Golf Course** is located between Chappell Lake and County Road 117. The Club House is also available for private functions. The Municipal Golf Course is a beautifully landscaped nine-hole golf course that expands the Chappell Lake and Pony Express Memorial Park into a large recreational “complex.”

**Central park** is located between Cutler and Thompson Avenues along the south side of 4th Street and comprises one acre. General amenities at the Park include playground equipment and public restrooms.

**Chappell Lake and Pony Express Memorial Park** is located east of State Spur 25A, between Highway 385 and Interstate 80. This recreational facility contains an estimated 31 acre lake with a walking trail around its perimeter. **Pony Express Memorial Park** includes four picnic shelter areas, camping sites, open grass lands, picnic areas and easy access to fishing areas along the Lake. This facility welcomes residents, visitors and travelers along the Interstate 80 corridor to the Community and serves as a “Gateway Entrance” to the City.

**Liberty Park** is located at the southwest corner of 2nd Street and Babcock Avenue, adjacent City Hall. The park features a globe metal sculpture, flags of each of the branches of the U.S. military and inscribed bricks of all of the veterans from Chappell and Deuel County. The variety of landscaping also makes this park unique.
PUBLIC FACILITIES, INFRASTRUCTURE & TRANSPORTATION.

- **LIBRARY**

Chappell Memorial Library and Art Gallery, located at 289 Babcock, was built in 1935. Hours of operation are Tuesday and Thursday 1:00 p.m. to 7:00 p.m. and also 1:00 pm to 5:00 p.m. on Saturday. The Library maintains a circulation of approximately 11,575 books and serial volumes, 22 subscriptions, and 24 video materials utilized by 487 registered users. Additionally, there is an outstanding collection of art, artifacts and a mastodon fossil exhibit.

- **MUSEUM**

The Sudman-Newman Heritage House Museum is located at the southeast corner of 5th Street and Vincent Avenue. This House was built in 1911 and was deeded to the City of Chappell in 1989 for use as a museum. Displays are associated with typical furnishings of residential living in the early 1900’s. The museum, pictured above, is also decorated by local organizations during the holiday season. The facility is leased to the County Historical Society, which allows viewing from 2:00 p.m. to 4:00 p.m. every Sunday.

- **EDUCATION**

Education is becoming increasingly important, with emphasis on technical and human relation skills. Standards developed by educators and planners can provide guidance in the creation of and addition to Chappell’s educational facilities. The Creek Valley Public School District should meet the following standards and guidelines:

- Schools should be centrally located;
- Schools should not be located near high traffic or heavily concentrated areas with high noise levels;
- Land acquisition should be made with future expansion in mind; and
- Adequate open space should be available to students.
The **Creek Valley Public School District** was established in 2004 after the communities of Chappell and Lodgepole voted to consolidate. The combined school system consists of three separate school buildings housing grades K-4, 5-8 and 9-12. The Elementary and High School buildings are both located in the City of Chappell, while the Middle School is located in Lodgepole.

Approximately 262 students are enrolled in the District at the start of the 2013-2014 School Year. District teachers rotate between classes in two or three of the buildings. The average years of teaching experience are estimated to be 20. Of the 27 Certified Teachers, seven have Master’s Degrees. The Creek Valley Superintendent’s Office is located in the Elementary School.

**Creek Valley Elementary School** is located at 6th and Hayward Avenue, in the north-central portion of Chappell. Grades Kindergarten through 4th are located in this school building, with a total student enrollment of 104.

The School was built in the 1940s, with several remodels, the last of which included a new heating and ventilation system. Staffing includes a total of 13 employees with eight being certified elementary school teachers. The student/teacher ratio is currently 12 to 1. A fully equipped computer lab with internet capabilities provides educational opportunities for the students.

**Creek Valley Middle School** is located in Lodgepole, Nebraska, approximately nine miles west of Chappell. Grades 5th through 8th attend the Middle School. The original building was constructed in 1918. The new building was constructed in 1960 and contains all classrooms.

Currently, there is a total staff of 17 employees, with 13 being certified teachers. Current enrollment for the 2013-2014 school year includes 72 students, resulting in a student/teacher ratio of 5.5 to 1.

Creek Valley Senior High School is located at 3rd Street and Washington Avenue. The School is home to grades 9 through 12, contains 14 classrooms and was originally constructed in the 1950s. Remodeling at the facility was completed in early 2000 for space to establish the Distance Learning Center. The total number of staff employed is 16, with 11 certified teachers and a teacher/student ratio of 8.3 to 1. The total enrollment is 86 students. There are a total of two computer labs, each fully accessible to the internet.
MEDICAL / ELDERLY SERVICES

The City of Chappell presently has limited modern health services to meet the needs of its residents. Local health services include one medical clinic, a nursing home and two home health care providers.

Hospital Services

The primary health care facilities for the Chappell are located in Sidney, Nebraska, at the Sidney Regional Medical Center. The Hospital is approximately 28 miles west of Chappell.

Medical Clinic

CAM Medical Clinic is located at 542 Vincent Avenue in Chappell, across the street and east of the Miller Memorial Nursing Home. This Clinic is operated by the Sidney Regional Medical Center. Two physicians and three PA-Cs provide care at this facility. The Clinic hours are 8:00 a.m. to 4:30 p.m., Monday through Friday.

Nursing Home

Miller Memorial Nursing Home is located at 589 Vincent Avenue. The nursing home was originally built in 1947 and has had several additions. The last remodeling project added a nine unit assisted living facility.

The total number of staff is 50, with 24 certified nurses. The nursing home is certified as a Non-Medicare, Medicaid Respite Care facility. The bed capacity of the nursing home is 24 and the assisted living facility is 13. Childcare services are also available in the facility, which has an outdoor playground attached to the building.

GOVERNMENT/PUBLIC SAFETY

Public administration facilities serve the citizens of the Community and conduct the business of government and carry out its operations. Therefore, it is essential these services are centrally located and convenient to the majority of the community’s citizens.

Police Protection

The Deuel County Sheriff’s Department provides law enforcement for the City of Chappell. The Department is located in the Deuel County Courthouse at 3rd and Vincent Avenue.
There are a total of four officers and one civilian employee. Four vehicles are maintained by the Department. Holding cells are located in the Sheriff’s Office, but are only utilized when the jail facilities at the Garden County Jail, located in the nearby Town of Oshkosh, are 100 percent occupied.

Fire Protection and Emergency Rescue

The Chappell Volunteer Fire Department is located 1650 2nd Street (Highway 30) at the eastern edge of Town. Emergency assistance is provided to the City and the majority of central and western Deuel County.

There are currently 29 total volunteers, two of which are EMT certified. The Department is authorized for 31 members. Emergency vehicles include two fire engine pumper trucks, three water tenders and two type-six grass rigs. Two ambulances are also maintained to support emergency medical calls. The fire insurance classification for the City is ISO “5”.

Civil Defense

The City of Chappell and all of Deuel County are provided Civil Defense services in association with Cheyenne, Morrill and Garden Counties by the Cheyenne County Emergency Management Agency. The organizations Director is the responsible for planning, advising and assisting the Counties and their Communities on all matters involving emergency management and civil defense. The Director coordinates with the County Sheriff Departments and Fire Chiefs of Chappell and all other Counties and their Communities in planning for public safety.

The planning and preparation for natural disasters and man-made emergencies focus on Mitigation, Preparation, Response and Recovery.

City Offices

Chappell City Hall is located at 757 2nd Street. The one story brick building was originally constructed in 1911 and was remodeled in 1984. The City Administrator, Treasurer, Secretary and Council Chambers are all located in the facility. Activities in the building include all official City business, such as City Planning Commission and City Council Meetings, Sub-Committee meetings and various other City business functions.
Post Office

The Chappell Post Office is located at 190 Vincent Avenue. The facility has 525 postal boxes. There is no curbside delivery service in Chappell. Two rural routes currently provide home or office delivery six days a week. The Post Office has a total of four employees.

Deuel County Fairgrounds

The County Fairgrounds are located approximately one-half mile west of Chappell on the north side of Highway 30. The Fairgrounds have several permanent barns, 4-H buildings and a dirt race track with grand stand. The Deuel County Fair is held annually, during the month of August, with additional events, including craft shows, special events and private functions held during various times throughout the year.
INFRASTRUCTURE

It is the responsibility of any community to provide a sound public infrastructure for its citizens, as well as to provide for anticipated growth. Therefore, it is important that the expansion of these systems be coordinated with the growth of the City.

💧 WATER SYSTEM

The Chappell water source consists of five wells, two of which have been decommissioned due to high arsenic levels. The remaining three wells are active water production wells. The wells pump directly into the distribution system without treatment. Four wells are located within the City Limits and one is located southwest of town at the Municipal Golf Course. The five wells have an average depth of 121 feet and their pumping capacity ranges from 275 to 760 gpm.

The wells are controlled by the existing elevated water storage tank. The system is served by one pressure district with no booster pumps. Three wells are equipped with emergency power.

A 1995 Water System Study reviewed and analyzed the Community’s system components. The Study tested for inorganic chemicals, including arsenic and nitrates and synthetic organic chemicals such as pesticides and volatile organic compounds.

Chappell water system meets the State and Federal Safe Drinking Water Act requirements. Several coliform bacteria violations have occurred in the past. Nitrates are in the range of 1.8 to 8.0, which is below the Federal standard (MCL) of 10.0 micrograms per liter (mg/l), however, these chemicals should be monitored on an annual basis. Recent arsenic test results are of concern, as compared to the recent EPA Standard of 10.0 mg/l. The arsenic rule should be closely monitored in Chappell. As arsenic levels in the remaining three wells are anticipated to exceed minimum standards within the 10-year planning period. Chappell is currently searching for a new well field for expansion within the next two years.

The public water mains within the City range generally from 4” to 12” in diameter. The approximate distribution of sizes as scaled from the water distribution system map, is as follows:

<table>
<thead>
<tr>
<th>Size</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>4”</td>
<td>12,500 L.F.</td>
</tr>
<tr>
<td>6”</td>
<td>9,600 L.F.</td>
</tr>
<tr>
<td>8”</td>
<td>11,200 L.F.</td>
</tr>
<tr>
<td>10”</td>
<td>10,800 L.F.</td>
</tr>
<tr>
<td>12”</td>
<td>2,600 L.F.</td>
</tr>
<tr>
<td>Total</td>
<td>46,700 L.F.</td>
</tr>
</tbody>
</table>

The total length of distribution mains within the City is approximately 46,700 lineal feet (8.8 miles). Approximately 12,500 lineal feet of 4” main (27 percent of the total) remains within the system, which are the oldest mains and do not meet industry standards. The majority of these mains are of cast-iron materials with some newer PVC extensions. Many of the sand cast-iron mains are estimated to have been constructed in the era from 1940 to 1960. The entire City is completely metered.
A major water system improvement was completed in 1998, consisting of the installation and replacement of approximately 21,000 lineal feet (4.0 miles) of 6”, 8”, 10”, and 12” water mains, a new 500,000 gallon elevated storage tank and modifications to Well No. 3, 4 and 5 pumps and the addition of emergency power engines to Well Nos. 3 and 4. The total cost of the project was approximately $1,930,000.

The fire hydrants and distribution valves are maintained by the City water staff. There are approximately 54 water hydrants in the system. The hydrants and distribution valves are generally tested a minimum of once per year. The city has also implemented a cross connection control program in accordance with State Guidelines.

The existing distribution system serves the basic domestic water service needs of most of the users. The normal operating system pressures are in the 70 to 80 psi range.

The Insurance Services Office periodically conducts a review and classification of a communities fire suppression system, which includes evaluations of the water system, fire department and fire communications. This was conducted in Chappell in February 2013. This evaluation resulted in an overall classification of 5 (on a scale of 1 to 10 with 1 being the best rating).

As a result of the 1998 Water System Improvements, the existing system provides adequate fire flow from hydrants throughout the system. Most hydrants within the system produce 900 to 1,050 gpm. Generally, the absolute minimum recommended fire flow requirement for residential areas is 1,000 gpm at 20 psi residential pressure. However, higher value or risk buildings normally require a larger fire flow. Downtown buildings, the schools and the grain elevator are examples of buildings that require 2,000 to 3,500 gpm of fire flow availability. The municipality is not responsible for fire flows greater than 3,500gpm.

The City water storage is provided by a 500,000 gallon steel pedestal elevated storage tank, built in 1998 and located in the northeastern portion of the City. The height of the elevated storage tank to the overflow line is approximately 115’ with an operating range of approximately 42’. The primary purpose of the tank is to provide adequate pressure particularly when the wells are not operating and to support fire flow protection. The tank should be drained and inspected every 3 to 5 years.

Water System Deficiencies and Recommended Improvements

Segments of the water system have recently been upgraded and improved. Major improvements have been completed to the distribution system and water storage. Unaccounted for water should be addressed. Also, distribution system water main replacements should be programmed to replace the existing 4” mains and provide looping where appropriate.
The City may need to provide future water source improvements as Federal and State water quality regulations become more stringent. Water quality parameters of specific concern include nitrates and arsenic.

**WASTEWATER SYSTEM**

The Chappell wastewater system consists of a collection system and a wastewater treatment plant. There are no lift stations in the collection system. The City is served by gravity sewers such discharge to the wastewater treatment plant, located approximately one-half mile southeast of the City.

The Chappell wastewater collection system is approximately nine miles of 4” to 12” diameter sanitary sewers, which are primarily vitrified clay pipes with PVC pipe in newer developments. The collection system appears to have adequate capacity. Some structural problems may occur due to age, tree roots and general deficiencies. Some of these sewer mains have been replaced.

The City staff is constantly reviewing the condition of sanitary sewers including the use of TV tapes. Also, some collection sewers are relatively flat and require periodic maintenance.

The wastewater treatment plant was originally constructed in the 1950s and upgraded in 1973. The current system is an activated sludge system. The secondary solids are recirculated to the wet well and/or wasted to the aerobic digester. After wastewater has been conditioned within the aeration basins, wastewater flows to the clarifier basins. The flow from the clarifiers can be diverted to either the lagoons or a chlorine contact basin. The chlorine basin is not utilized, as there is not currently a requirement for chlorination. Effluent from the lagoons is discharged to Lodgepole Creek.

The initial basic design and sizing of units was predicated upon treating a waste of 6,780 population equivalent. The 1973 wastewater treatment plant modifications and associated capacity was influenced directly by industry standards at the time.

The average wastewater flow to the treatment plant, as of 2001, was approximately 60,000 gallons per day. The plant and hydraulic design capacity is over 350,000 gallons per day. The plant therefore, has ample capacity throughout the 10-year planning period.

The existing wastewater treatment plant is well maintained and operated, considering its age. The treatment plant has excess capacity for both organic and hydraulic loading, but is approaching its useful life expectancy. Equipment and structures are deteriorating and major improvements will need to be completed if the existing plant is to serve the City in the future. These improvements relate to the secondary clarifier, yard piping, communication replacement, electrical and aeration system improvement sand process controls.
PUBLIC FACILITIES, INFRASTRUCTURE & TRANSPORTATION.

❖ SOLID WASTE

The Community’s solid wastes are collected and transported to the Juelsburg, Colorado Sanitary Landfill. The waste is collected twice per week by City staff with City owned equipment (45 yard Impact Trash Compactor). The City also has implemented a recycling program. Recycling is accomplished on a volunteer basis via a community drop off center.

❖ STORM WATER DRAINAGE

There are some segments of storm water drainage systems in the City, including Downtown Chappell. There are no current plans to expand the existing system throughout the City.

❖ ELECTRICAL SYSTEM

The electrical distribution system is owned and operated by the City. The City is supplied by the Nebraska Municipal Power Pool and the Western Area Power Administration.

❖ NATURAL GAS SYSTEM

The natural gas system is operated and supplied by SourceGas. There are no known improvement needs.

TRANSPORTATION

The availability of a convenient and efficient transportation system is essential to the continued economic and physical development of Chappell. An adequate transportation system is required to transport goods and services to and from major travel routes and market centers outside the City, while providing for the circulation needs within the Community. The overall purpose of the Transportation Plan is to provide the necessary guidelines for the safe movement of people and vehicles throughout the planning area.

The primary sources of information utilized to develop the Transportation Plan were (1) Chappell “One- and Six-Year Plans” and (2) State of Nebraska Department of Roads “Nebraska Highway Program” (Fiscal Years 2013-2019 and Beyond).

❖ EXISTING TRANSPORTATION SYSTEM

Illustration 5.2, State Functional Classifications, depicts the transportation system in Chappell. Highway’s 30, 385 and State Spur L25A are all classified as “Major Arterial” highways. Interstate 80 is an “Interstate” corridor providing non-stop highway travel throughout Nebraska and the nation. Wheatland Drive is classified as an “Other Arterial,” while all other city streets are considered “Local”. Local streets provide transportation throughout the City, while the state highways and county roads provide transportation into the County, adjacent communities and areas beyond.
STATE FUNCTIONAL CLASSIFICATIONS MAP
CHAPPELL, NEBRASKA

ILLUSTRATION 5.2
PUBLIC FACILITIES, INFRASTRUCTURE & TRANSPORTATION.

TRAFFIC VOLUME MAP
CHAPPELL, NEBRASKA

ANNUAL AVERAGE 24-HOUR TRAFFIC VOLUME

<table>
<thead>
<tr>
<th></th>
<th>2008</th>
<th>2010</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>820</td>
<td>1,020</td>
<td>990</td>
</tr>
<tr>
<td>B</td>
<td>805</td>
<td>940</td>
<td>1,000</td>
</tr>
<tr>
<td>C</td>
<td>550</td>
<td>660</td>
<td>545</td>
</tr>
<tr>
<td>D</td>
<td>7,220</td>
<td>7,450</td>
<td>6,970</td>
</tr>
<tr>
<td>E</td>
<td>4,320</td>
<td>4,475</td>
<td>4,335</td>
</tr>
<tr>
<td>F</td>
<td>7,440</td>
<td>7,715</td>
<td>7,210</td>
</tr>
<tr>
<td></td>
<td>4,385</td>
<td>4,505</td>
<td>4,330</td>
</tr>
</tbody>
</table>

HANNA:KEELAN ASSOCIATES, P.C.
COMMUNITY PLANNING & RESEARCH
* Lincoln, Nebraska * 402.464.5383 *

ILLUSTRATION 5.3

Chappell, Nebraska Comprehensive Plan-Update - 2023 5.14
Traffic Volume

The Nebraska Department of Roads monitors traffic volume in the Chappell area, on county roads and state and federal highways. This tabulation process is done to identify the appropriateness of the existing road classification and engineering standards. Illustration 5.2 also identifies the average daily traffic counts for state and federal transportation routes around Chappell.

Road Classifications

Nebraska Highway Law identifies the eight functional classifications of rural highways as follows:

1. Interstate: Which shall consist of the federally designated National System of Interstate and Defense Highways;

2. Expressway: Second in importance to Interstate. Shall consist of a group of highways following major traffic desires in Nebraska and ultimately should be developed to multilane divided highway standards;

3. Major Arterial: Consists of the balance of routes which serve major statewide interests for highway transportation in Nebraska. Characterized by high speed, relatively long distances, and travel patterns;

4. Scenic-Recreation: Consists of highways or roads located within or which provide access to or through state parks, recreation or wilderness areas, other areas of geological, historical, recreational, biological, or archaeological significance, or areas of scenic beauty.

5. Other Arterial: Which shall consist of a group of highways of less importance as through-travel routes which would serve places of smaller population and smaller recreation areas not served by the higher systems;

6. Collector: Which shall consist of a group of highways which pick up traffic from many local or land-service roads and carry it to community centers or to the arterial systems. They are the main school bus routes, mail routes, and farm-to-market routes;

7. Local: Which shall consist of all remaining rural roads, except minimum maintenance roads;

8. Minimum Maintenance: Which shall consist of (a) roads used occasionally by a limited number of people as alternative access roads for area served primarily by local, collector, or arterial roads, or (b) roads which are the principal access roads to agricultural lands for farm machinery and which are not primarily used by passenger or commercial vehicles.
The rural highways classified, under subdivisions (1) thru (3) of this section should, combined, serve every incorporated municipality having a minimum population of 100 inhabitants or sufficient commerce, a part of which will be served by stubs or spurs, and along with rural highways classified under subsection (4) of this section, should serve the major recreational areas of the state. Sufficient commerce shall mean a minimum of two hundred thousand dollars of gross receipts under the Nebraska Revenue Act of 1967.

**FUTURE CHAPPELL TRANSPORTATION SYSTEM**

The Future Transportation System in Chappell is outlined in the One- and Six-Year Plan for Street Improvements. The One-Year Plan is for projects to be undertaken in 2014, while the Six-Year Plan is for projects to be undertaken through 2019, or earlier if funding becomes available. A list of projects is also identified for future road improvements beyond the time frame of the One-and Six-Year Plan. The official One-and Six-Year Street Improvement Program “Project List” is available in the Appendix of this Comprehensive Plan.

The Six-Year Highway Program for fiscal year 2014 to 2019 on the State Highway System is completed annually for the entire State. District Five, which includes Chappell, does not identify any One-Year projects. The Six-Year Plan identifies three projects in the Chappell planning jurisdiction. The first project STP-30-1(132) includes resurfacing for Highway 30 from the Corporate Limits west 10.2 miles. Two separate projects are identified along Interstate 80, one to the east (NH-80-2(106)) and the other (NH-80-2 (103)) to the west of the Chappell interchange are planned to involve concrete paving and bridge work.
SECTION 6
Community & Economic Development Initiative.
SECTION 6
COMMUNITY & ECONOMIC DEVELOPMENT INITIATIVE.

INTRODUCTION

This Section addresses strategies and general procedures for Community and Economic Development in Chappell. “Community Development” is a term which encompasses such varied activities as neighborhood redevelopment, urban design, Downtown redevelopment and historic preservation. The underlying theme that unifies these activities is the conservation and reuse of existing built development and infrastructure. Economic development addresses the topics of business retention and development, and public relations. Stabilizing population, through 2023, alerts the Community leadership and local economic organizations to prepare and implement programs of job retention and creation.

EXISTING CONDITIONS

Highway 30, an east/west highway, intersects with the north/south Highway Spur L25A at the intersection of 2nd Street and Babcock Avenue, near the east side of Downtown Chappell.

State Spur L25A connects the City of Chappell to the Interstate 80 Corridor, which is located approximately 1/2 mile south of Downtown Chappell. This further connects Chappell to the Cities of Denver, Colorado, and Lincoln and Omaha, Nebraska, and beyond.

Today, Chappell is an attractive Nebraska Community with a stable but increasing population base. Many of the challenges facing the Community are not unique to mid-western Cities and Towns. With a progressive stance, the City of Chappell will be able to prosper and continue its economic and physical growth throughout the 10-year planning period.

Today (2013) the City of Chappell lacks hotel/motel and service oriented businesses. The City does support a gas station/convenience store at the Interstate 80 interchange. A few businesses are located within Town along the Highway 30 Corridor. Short commute times to the nearby the larger Communities of Sidney and Ogallala will continue to limit the types of commercial businesses that can be sustained in Chappell.
COMMUNITY DEVELOPMENT PLAN

Downtown Chappell, with equal traveling distances from all parts of the Community, should remain the City’s social and economic focal point. Primary residential growth areas, highlighted in Illustration 4.6 are identified to the northern, eastern and southeastern portions of the Community, beyond the current Corporate Limits of Chappell.

A NEED FOR HOUSING REHABILITATION

The recently completed Community Housing Study identified the need to potentially rehabilitate up to 70 housing units during the 10-year planning period. The utilization of Local, State and Federal Funding Sources will be vital in providing appropriate incentives for property owners to rehabilitate substandard dwellings. The use of Tax Increment Financing for redevelopment efforts for infrastructure and private property improvements, identified in the Comprehensive Plan, is strongly encouraged.

Supplementing these local programs with additional State and Federal funding, such as the Community Development Block Grant Program, would assist the citizens of Chappell in improving and rehabilitating their dwelling units.

While the majority of the housing units in Chappell are exceptionally well-maintained, it is estimated that up to 70 housing structures are in need of moderate to substantial rehabilitation, with an additional 21 units in need of demolition. As the housing stock continues to age and deteriorate, programs such as rehabilitation grants are encouraged to provide all Chappell inhabitants with safe and decent housing.

A shortage of safe, decent and affordable housing presently exists in Chappell. The lack of an appropriate amount of modern single family dwellings for purchase and an expected increase in renter households by 2023 will require new rental residential development, such as duplexes/triplexes and general apartment units.

DOWNTOWN AREA

The Downtown has been the social and economic focus of Chappell. The Original Town Plat of Chappell provided 25’ x 140’ commercial sized lots fronting on 2nd Street. Some of these buildings currently sit on multiple lots to adequately accommodate the facility’s needed space.

Directly south of the Downtown Business District is the Union Pacific Railroad Corridor. The Railroad occupies a tract of land through the Community with little to no alleviation of noise and ambient dust caused by passing trains. To insure a safe, pleasant environment in Downtown Chappell, the Community should consider various methods of noise and dust reduction, during the 10-year planning period.

With the assistance of the Panhandle Area Development District (PADD), Community Action Partnership of Western Nebraska (CAPWN) and the Nebraska Department of Economic Development, the City of Chappell can become a better place to live and raise a family. “Tools of Public Intervention,” such as Tax Increment Financing and Community Development Block Grants, must be used to make improvements to public infrastructure in the Downtown.
The City of Chappell serves as a vibrant Community, with short traveling times to area facilities and places of employment and entertainment such as the nearby Cities of Sidney and Ogallala, as well as to Denver, Colorado and Lincoln and Omaha, Nebraska. The following activities were discussed at Community Open Houses in Chappell.

- Update and enforce minimum building codes to prevent vacant and occupied buildings from deteriorating;
- Encourage property and business owners to utilize the provisions of Tax Increment Financing as both a development and redevelopment tool;
- Maintain and improve the aesthetic appearance of Community;
- Encourage the development of additional service businesses, especially those catering to the needs of travelers along Highway 30 and Interstate 80;
- Target highway oriented commercial businesses to the Highway 30 corridor, where highway traffic in combination with Chappell residents could justify additional commercial and small multi-business facilities;
- Market the Interstate 80 interchange as a location suited for hotel and truck-stop service centers. These business types are needed to diversify the local economy in Chappell.

**NEBRASKA COMMUNITY DEVELOPMENT LAW**

The Nebraska Community Development Law was approved by the Unicameral in 1952. The Law was developed to assist Communities with economic growth and redevelopment activities. In order to use the Community Development Law to provide Tax Increment Financing, an area must first be declared blighted and substandard.

A targeted **Blight & Substandard Determination Study and General Redevelopment Plan** should be implemented by Chappell, in accordance with the requirements of the Nebraska Community Development Law. The Downtown, adjacent residential areas and associated industrial businesses along the Union Pacific Railroad Corridor could all benefit from Tax Increment Financing as an incentive for development and redevelopment.
**ECONOMIC DEVELOPMENT PLAN**

The existing economic conditions in Chappell have the potential for increased activities. The City has recognized the need to diversify its economic base, by planning for and promoting more light manufacturing and service oriented businesses.

**ECONOMIC EXPECTATIONS**

The future economic success of Chappell will be attributed to locally organized efforts to create public and private partnerships. These partnerships will include the involvement of the City of Chappell, Deuel County, PADD and CAPWN. The efforts of these partnerships will play a vital role in producing future economic development opportunities in Chappell.

**HOUSING & ECONOMIC DEVELOPMENT**

Important to the future economic development success of Chappell is the recognition that housing is economic development. The City of Chappell has completed a Community Housing Study, as a component of this Comprehensive Plan-Update, to identify housing shortfalls and document demand for all components of the housing market, with emphasis on all income categories and specific housing types.

**BUSINESS & INDUSTRIAL DEVELOPMENT**

Chappell needs to pursue the service, commercial and industrial businesses that would best serve the Community. The City, in combined efforts with Deuel County and PADD, should address the recruitment, planning and financing of new business, commerce and housing.

The retention and expansion of existing businesses should have equal priority to that of new developments. This team of organizations should prepare an annual strategic Economic Development Initiative for Chappell. This initiative should include a detailed listing of service, commercial and industrial business types most appropriate for Chappell.
JOB CREATION

As discussed throughout this Comprehensive Plan-Update, the City of Chappell should be cognizant of a steadily increasing population with a very low unemployment rate. The City should actively pursue the creation of up to 75 new jobs, during the next 10 years. The majority of new jobs during the planning period should be created in the retail services and manufacturing sectors.

Large employers, such as the Miller Memorial Nursing Home and the Creek Valley Public Schools, as well as those located in the nearby Communities of Sidney and Ogallala, exist near the City and play an important role in the economic stability of Chappell. The Community should plan for additional centers of large employment and be ready to supply additional affordable housing to any incoming employees.

COMMUNITY & ECONOMIC DEVELOPMENT ACTION STRATEGIES

- Create a Community and Economic Development Initiative in Chappell to partner economic development activities with all major "players," both public and private;
- Establish an annual Community and Economic Development Strategy in conjunction with the Initiative;
- Maintain tools of "public intervention" to finance economic development activities in Chappell, including Tax Increment Financing and LB 840 and 1240;
- Create a mix of new businesses appropriate for the City of Chappell; Recruit volunteers for Community and Economic Development;
- Develop urban design criteria to follow in the development of residential and commercial activities in existing developed areas;
- Actively recruit businesses and light industry located in other Communities, to expand in Chappell. Establish programs of (various) tax incentives to stabilize and increase local jobs;
- Maximize positive traits of the Community such as small town living with short commute time to big City facilities in Sidney and Ogallala for employment, health care, shopping, entertainment;
- Continue to focus on redevelopment efforts in the Downtown and Highway 30 Corridor areas focusing on commercial and residential rehabilitation and over all property clean up, the reduction of noise, dust and other pollutants created from the Union Pacific Railroad Corridor, landscaping and street trees, and infrastructure improvements, and;
- Continue to make improvements to parks and recreational areas such as upgraded and new playground equipment, additional athletic fields and to expand available recreation activities to potential trail systems between Chappell Lake and Downtown.
HOUSING FINANCIAL RESOURCES

To produce new and upgrade existing renter and owner occupied housing in a Nebraska Community, a public/private partnership must occur to access affordable housing programs. The following information identifies various funding sources, programs and strategies available to assist in financing future housing activities in the Community. The (strategic) combination of two or more sources can assist in reducing development and/or operational costs of proposed affordable housing projects.

LOCAL FUNDING OPTIONS

Local funding for use in housing development and improvement programs are limited to two primary sources (1) local tax base and (2) dollars secured via state and federal grant and loan programs, which are typically only available to local units of government (City, City or County).

LOCAL TAX BASE

Tax Increment Financing (TIF) can use added property tax revenues, created by growth and development in a specific area, to finance improvements within the boundaries of a designated Redevelopment Area. Utilizing the Nebraska Community Development Law, each Community in Nebraska has the authority to create a Community Redevelopment Authority (CRA) or Community Development Agency (CDA).

A Community with a CRA or CDA has the authority to use TIF for commercial, industrial and residential redevelopment activities. The CRA/CDA can utilize TIF for public improvements and gain the revenue associated with these improvements. The tax increment is the difference between the taxes generated on an existing piece of property and the taxes generated after the redevelopment occurs. One hundred percent (100%) of the increment can be captured for up to 15 years, by the CRA, and used for public improvements in a designated Redevelopment Area.

Other Local Options

Local Housing Authority – Public Housing Authorities or Agencies can sponsor affordable housing programs. The Housing Authority is empowered by existing legislation to become involved in all aspects of affordable housing in the Community. The Housing Authority has access to a variety of sources of funding, as well as the ability to secure tax exempt bond financing for local based housing projects. The City of Chappell does have a Housing Authority, primarily focused upon the Hilltop Manor Apartments.

Major Area Employers and/or Community Foundation Assistance – This is a common occurrence today within many cities and counties nationwide, in an effort to provide housing opportunities to low- and moderate-income persons and families. Major area employers and Community Foundations are becoming directly involved in housing developments and improvements. These Foundations and/or Major Employers could provide the following:

- Direct grants;
- Low interest loans;
- Letter of Credit, for all or a percentage of loans;
- GAP Financing – provides financing to cover the unfunded portion of development costs, as a deferred or less than market rate loan to the development;
- Mortgage Interest Rate Subsidy – provides buy down of a conventional loan;
- Purchase Bonds/Tax Credits – make a commitment to purchase either/both taxable/tax exempt bonds and/or low-income tax credits utilized to finance housing development.
Local Lender Participation – Local and regional lending institutions serving a particular Community or County should create a partnership to provide technical assistance to housing developers and share bridge- and permanent financing of local housing programs.

The previously described local funding options could be used separately or “pooled” together and utilized in equal proportions for the implementation of City or County-wide housing programs.

STATE PROGRAMS

State programs available to assist in funding a community housing initiative include resources available from the Nebraska Department of Economic Development (NDED), Nebraska Investment Finance Authority (NIFA), Nebraska Energy Offices (NEO) and Nebraska Department of Health and Human Services (NDHHS). The following describes the primary housing funding programs provided by these State agencies.

Nebraska Department of Economic Development (NDED)

The proposed 2013 Annual Action Plan, prepared and administered by the NDED, has the following, approximate allocations of State and Federal funds available for housing activities.

- $9 Million Community Development Block Grant
- $2.7 Million HOME Investment Partnership Fund
- $956,000 Emergency Shelter Grant Program
- $2 Million Homeless Shelter Assistance Trust Funds
- $6 Million Nebraska Affordable Housing Trust Fund
- $347,000 Housing Opportunities for Persons with AIDS

The NDED also administrates the non-entitlement Community Development Block Grant (CDBG) program, available to local Community and County municipalities for financing housing, planning and public works projects. All Nebraska Counties and Communities are an eligible applicant for CDBG funds. Lincoln, Omaha and Grand Island receive an annual allocation of CDBG funds, from the Department of Housing and Urban Development, as entitlement communities.

The remaining Nebraska Communities are classified as non-entitlement Communities and compete annually for CDBG funds for various community and economic development programs, including housing. Seven Nebraska Communities, each with a population of 20,000 to 49,999 are eligible for multi-year CDBG funding from the Comprehensive Revitalization Category of funding.

The NDED also administrates the HOME funds. HOME funds are available to authorized, local or regional based Community Housing Development Organizations (CHDOs) for affordable housing repair and/or new construction, both rental and owner. An annual allocation of HOME funds is established for CHDOs based on individual housing programs. HOME funds are also available to private developers, via a local non-profit as gap financing on affordable housing projects.
Nebraska Affordable Housing Trust Fund (NAHTF) – The NAHTF is available to assist in funding affordable housing programs. The Trust Fund is administered by the NDED and is used to match with Low-Income Housing Tax Credit allocations, for new affordable rental housing, funding of non-profit operating assistance, financing distressed rental properties and the acquisition/rehabilitation of existing rental programs.

Nebraska Investment Finance Authority (NIFA)

The NIFA is a primary provider of funding for affordable housing development in Nebraska. The primary program is the Section 42 Low Income Housing Tax Credits (LIHTC) utilized to help finance both new construction and rehabilitation of existing rental projects.

A popular LIHTC Program is the CROWN (Credit-to-Own). CROWN is a lease-to-own housing program developed to bring home ownership within reach of very low-income households while assisting local governments in revitalizing their neighborhoods. The objectives of the program are to:

1. Construct housing that is decent, safe, and permanently affordable for low income residents;
2. Develop strong public/private partnerships to solve housing problems;
3. Offer renters a real plan to own a home; and
4. Restore unused, vacant, in-fill lots to become a neighborhood asset.

CROWN utilizes the LIHTC program as one financing tool. Other sources of financing may be HOME funds, NAHTF, Federal Home Loan Bank funding, local government grants and loans and traditional development financing sources.

The CRANE (Collaborative Resources Alliance for Nebraska) is a LIHTC set-aside program for targeted resources, for community development and housing programs.

The NIFA also provides the Single Family Mortgage Program – This program provides a less than current market interest rate for First-time Homebuyers in Nebraska. Local lender participation is encouraged in this Program.

Midwest Housing Equity Group (MHEG)

The MHEG was created in 1993 to secure equity capital to invest into affordable rental housing throughout Nebraska, Kansas, Iowa and Oklahoma. MHEG is a privately-owned non-profit corporation with a nine-member board of Directors and receives no federal or state dollars. MHEG’s income is derived from its ability to obtain equity capital and investing into affordable housing properties.

MHEG provides equity financing for the federal low income housing tax credit program, as defined in Section 42 of the Internal Revenue Code. In addition to tax credit syndication, MHEG staff provides technical assistance to developers, owners and management companies on the development and management of tax credit properties.

CHDOs & Community Action Agencies/Partnerships

The Community Action Partnership serving a particular Community or County can provide housing and weatherization programs in a specified service area. A Community Action Partnership also provides community social services, emergency services, family development and nutrition programs.
Nebraska Communities and Counties should work with their Community Action Partnership to provide safe, accessible, affordable housing to its residents.

The Community Action Agency/CHDO serving Chappell is Community Action Partnership of Western Nebraska (CAPWN). The Panhandle Area Development District is available to provide grant writing and administration services to the City of Chappell.

Nebraska Energy Office (NEO)

Low-Income Weatherization Assistance Program – This Federally funded program assists people with low-incomes by making energy improvements to their homes. The program is a statewide effort carried out primarily by Nebraska Community Action Agencies.

The weatherization program concentrates on those energy improvements which have the greatest impact on making recipient’s homes more energy efficient, thereby lowering their energy consumption. Eligible weatherization measures include caulking, weather stripping, ceiling, wall and floor insulation and furnace repair.

Nebraska Department of Health and Human Services (NDHHS)

NDHHS administers the Nebraska Homeless Shelter Assistance Trust Fund and Emergency Shelter Grant to assist local or regional based groups in the provision of housing improvements for homeless and “at risk of homeless” persons and families.

REGIONAL FUNDING

Federal Home Loan Bank

Affordable Housing Program – This program makes low-interest loans to finance home ownership for families with incomes at or below 80 percent of the median income for the area. The program can also finance the purchase, construction or rehabilitation of rental housing in which 20 percent of the units are occupied by and affordable to very low-income households. These funds are available through the Federal Home Loan Bank member institutions in Nebraska and are loaned on a competitive basis, with semi-annual application dates. This program can be combined with other programs (i.e., State CDBG, Low-Income Housing Tax Credit, etc.) to absorb the development subsidy requirements for both rental and owner occupied housing projects.

FEDERAL FUNDING

A primary provider of Federal funding to Nebraska Communities and Counties for housing development, both new construction and rehabilitation, is the Department of Housing and Urban Development (HUD). Housing programs provided by HUD are available for both profit and non-profit developers. Funds from these programs are commonly mixed or pooled with other public funding sources, as well as conventional financing.

U.S. Department of Housing and Urban Development (HUD)

- Section 8 Moderate Rehabilitation SRO’s – Available to Public Housing Authorities to provide rental assistance for homeless individuals in rehabilitated single-room occupancy housing.

- Shelter Plus Care – Provides rental assistance and supportive services on a long-term basis for homeless individuals with disabilities.
HUD Section 202 Program – Provides a capital advance to non-profit developers for development of elderly housing for either independent living or congregate (frail elderly) living. The program provides 100 percent financing, with a capital advance, no repayment loan and operational subsidy.

HUD Section 811 Program – Provides a capital advance to non-profit developers for development of housing for persons with a disability(ies). The program provides 100 percent financing with an operational subsidy.

Mortgage Insurance – The HUD 221(d)(3) provides up to 100 percent mortgage insurance for non-profit developers and 90 percent mortgage insurance coverage for profit-motivated developers 221(d)(4). Permanent financing can be provided via the public funds (i.e., CDBG, HOME) and/or conventional financing.

U.S.D.A. Rural Development (RD)

a) Section 515 Program – Provides a direct interest subsidized loan for the development of family and elderly housing, including congregate and rental housing for persons with a disability. A Section 538 mortgage insurance program is also available.

b) Section 502 Program – Provides either a mortgage guarantee or direct loan for single family homeownersons for low- and moderate-income persons/families, including persons with a disability. Section 504 Program – Provides for the rehabilitation of homes.

c) Community Facilities Program – Provides a direct, interest subsidized loan for a variety of projects specific, community facility improvement programs including new construction or housing rehabilitation for “special populations.”

d) Preservation Program – Administered by qualified local and regional organizations/agencies to assist in housing rehabilitation programs in Nebraska Communities. This

could include a local based, planned program of home modification income eligible to low/moderate-income persons and families.

e) Business & Industry Program – The RD Business and Industry Program allows for loan mortgage guarantee for commercial projects, including retirement/assisted care housing.

Other Federal Funding

Other funding products that may serve to be useful in the development of affordable housing for persons with a serious mental illness are the HUD Rural Housing and Economic Development Fund, the Native American Housing and Self-Determination Act and CDBG funds and the Rehabilitation Tax Credit, available via the Historic Preservation Act.
SECTION 7
Energy Element.
SECTION 7
ENERGY ELEMENT.

INTRODUCTION

This Section of the Chappell Comprehensive Plan - Update complies with a July 2010 amendment to Nebraska State Statutes 23-114.02, requiring updates to a Municipal Comprehensive Plan to include an “Energy Element.” This component of the Plan – Update assesses the energy infrastructure and energy use by sector, including residential, commercial, and industrial. This section is also intended to evaluate the utilization of renewable energy sources and promote energy conservation measures.

PUBLIC POWER DISTRIBUTION

Energy usage and consumption throughout Chappell has followed the trends prevalent in the State of Nebraska. Electrical power is distributed across Chappell and its One-Mile Planning Jurisdiction by the Municipal Energy Agency of Nebraska (MEAN), a division of the Nebraska Municipal Power Pool (NMPP), which supplies Chappell’s electrical power, although the City owns the distribution system. The City of Chappell has the ability to produce their own electricity for their customers, but only uses their generators as an emergency backup during power outages.

MEAN has ownership interest in several electric generating utility in the State of Nebraska, NPPD provides electricity to all or parts of 91 of the State’s 93 Counties. NPPD’s primary generating facilities are powered by coal, oil, natural gas and nuclear energy. Additionally, NPPD, as well as NMPP, purchases electricity from the Western Area Power Administration (WAPA), which markets and transmits electricity from federally owned hydropower and wind facilities.

NMPP was created in 1975 as 19 municipal electric utilities pooled their resources to better handle escalating fuel prices while still serving their Communities effectively and efficiently. Today, 151 Nebraska Communities, including the City of Chappell, are member Communities of NMPP. Several Communities in the States of Kansas, Colorado, Wyoming and North Dakota are also members of this organization.
The passage of legislation in 1981 allowed the formation of the Municipal Energy Agency of Nebraska (MEAN), a wholesale electric supply organization. This organization is a program operated by NMPP. Since its inception, MEAN has relied upon member generation as part of its power supply and, with its growth, has secured additional sources of electric generation from other organizations.

Today MEAN supplies wholesale electricity to more than 65 Communities in Colorado, Iowa, Wyoming and Nebraska, including the City of Chappell. MEAN obtains its electric power from Coal, Wind, and Hydro generation facilities in Iowa, Wyoming and Nebraska by ownership interest in a percentage of the plants or its output. Nearly all of the Hydroelectric power obtained by MEAN is purchased from the Western Area Power Administration. Community members of the MEAN organization also supplement power to the organization from municipal generators powered by natural gas and oil. The City of Chappell, owns and maintains two.

The Power Supply Mix utilized by MEAN is originated from five types of generation processes including:

- 45 percent from Coal powered plants.
- 22 percent from Fuel Oil and Natural Gas.
- 21 percent from Hydro-electric purchases.
- 8 percent from Nuclear generation purchases.
- 4 percent from Wind/Other renewable generation and purchases.

**RENEWABLE ENERGY PROJECTS**

Currently, MEAN’s total renewable energy capacity is nearly 50 megawatts, or 9 percent of its total electric generating capacity.

MEAN also has a 50-megawatt, long-term participation power agreement with the Nebraska Public Power District (NPPD). The agreement provides MEAN with energy priced at a fixed rate from NPPD through 2023.

**CONSUMPTION OF ELECTRICITY IN CHAPPELL**

The use of electrical power by the City of Chappell is analyzed in Table 7.1 by comparing the consumption of electricity on an annual basis between 2008 and 2012. MEAN electrical usage data indicates that the total consumption of electrical energy peaked in 2010 at 11,983,099 KWh’s.

Year to year comparisons indicate that after a 1.3 percent increase between 2008 and 2009, electrical usage increased by 14.3 percent from 2009 to 2010. However, a percentage decrease of 2.1 percent and 1.3 percent the following two years in 2011 and 2012, indicates that peak electrical use in 2010 was the result of extended electrical use in both winter and summer months of that year.
### TABLE 7.1
MEAN SERVICE SCHEDULE
MONTHLY / ANNUAL DEMAND
2013

<table>
<thead>
<tr>
<th></th>
<th>2008 Total KWh</th>
<th>Peak Demand</th>
<th>2009 Total KWh</th>
<th>Peak Demand</th>
<th>2010 Total KWh</th>
<th>Peak Demand</th>
<th>2011 Total KWh</th>
<th>Peak Demand</th>
<th>2012 Total KWh</th>
<th>Peak Demand</th>
</tr>
</thead>
<tbody>
<tr>
<td>JAN.</td>
<td>1,867,041,519</td>
<td>1,890</td>
<td>1,028,561</td>
<td>2,098</td>
<td>1,092,295</td>
<td>2,218</td>
<td>1,204,468</td>
<td>1,991</td>
<td>1,071,796</td>
<td></td>
</tr>
<tr>
<td>FEB.</td>
<td>1,677,892,065</td>
<td>1,654</td>
<td>854,186</td>
<td>1,911</td>
<td>1,000,950</td>
<td>2,383</td>
<td>1,108,552</td>
<td>1,948</td>
<td>1,063,830</td>
<td></td>
</tr>
<tr>
<td>MAR.</td>
<td>1,523,826,503</td>
<td>1,692</td>
<td>870,943</td>
<td>1,609</td>
<td>902,223</td>
<td>1,939</td>
<td>1,103,125</td>
<td>1,611</td>
<td>789,396</td>
<td></td>
</tr>
<tr>
<td>APR.</td>
<td>1,493,722,374</td>
<td>1,472</td>
<td>753,958</td>
<td>1,460</td>
<td>754,167</td>
<td>1,631</td>
<td>819,890</td>
<td>1,334</td>
<td>707,864</td>
<td></td>
</tr>
<tr>
<td>MAY.</td>
<td>1,463,671,044</td>
<td>1,489</td>
<td>686,163</td>
<td>1,679</td>
<td>770,205</td>
<td>1,341</td>
<td>722,850</td>
<td>1,573</td>
<td>756,820</td>
<td></td>
</tr>
<tr>
<td>JUN.</td>
<td>1,729,641,941</td>
<td>1,888</td>
<td>703,482</td>
<td>2,303</td>
<td>861,739</td>
<td>2,142</td>
<td>758,384</td>
<td>2,783</td>
<td>1,069,300</td>
<td></td>
</tr>
<tr>
<td>JUL.</td>
<td>2,471,1,084,564</td>
<td>1,878</td>
<td>860,151</td>
<td>2,593</td>
<td>1,163,239</td>
<td>2,923</td>
<td>1,239,809</td>
<td>2,746</td>
<td>1,387,218</td>
<td></td>
</tr>
<tr>
<td>AUG.</td>
<td>2,345,1,055,468</td>
<td>2,135</td>
<td>972,937</td>
<td>2,537</td>
<td>1,253,709</td>
<td>2,711</td>
<td>1,161,044</td>
<td>2,632</td>
<td>1,103,047</td>
<td></td>
</tr>
<tr>
<td>SEP.</td>
<td>1,362,688,792</td>
<td>1,577</td>
<td>755,269</td>
<td>1,850</td>
<td>833,998</td>
<td>2,115</td>
<td>727,734</td>
<td>2,114</td>
<td>830,884</td>
<td></td>
</tr>
<tr>
<td>OCT.</td>
<td>1,404,715,754</td>
<td>1,818</td>
<td>935,242</td>
<td>1,830</td>
<td>926,423</td>
<td>1,883</td>
<td>908,453</td>
<td>1,790</td>
<td>903,630</td>
<td></td>
</tr>
<tr>
<td>NOV.</td>
<td>1,561,818,833</td>
<td>1,796</td>
<td>894,144</td>
<td>2,289</td>
<td>1,254,998</td>
<td>1,927</td>
<td>986,313</td>
<td>1,569</td>
<td>836,494</td>
<td></td>
</tr>
<tr>
<td>DEC.</td>
<td>2,056,1,149,484</td>
<td>2,095</td>
<td>1,173,142</td>
<td>2,232</td>
<td>1,169,153</td>
<td>1,882</td>
<td>1,065,939</td>
<td>1,982</td>
<td>1,066,043</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>20,951,10,358,341</td>
<td>21,384</td>
<td>10,488,178</td>
<td>24,391</td>
<td>11,983,099</td>
<td>25,095</td>
<td>11,734,692</td>
<td>24,073</td>
<td>11,586,322</td>
<td></td>
</tr>
</tbody>
</table>

*Peak Demand is represented as the Peak Hourly Demand in KW’s.
Source: Municipal Energy Agency of Nebraska and Nebraska Municipal Power Pool.
RENEWABLE ENERGY STRATEGIC PLAN

As of July 2013, the NPPD Strategic Plan states:

“NPPD will evaluate all forms of renewable resources feasible in Nebraska and incorporate them in the total mix of NPPD- owned generation and contract purchases with a goal of achieving 10 percent of our energy supply for NPPD’s native load from renewable resources by 2020.”

The Strategic Plan promotes the addition of a minimum 80 megawatts of wind-generated power during every two-year period, reaching the 10 percent goal by 2020.

As of 2012, approximately:

- 45 percent of NPPD’s energy generation was from coal.
- 43 percent was from nuclear.
- 2 percent generation from oil & gas.
- 8 percent renewable sources (including 4 percent hydropower and 4 percent wind and less than 1 percent from methane).
- The remaining 11 percent of NPPD’s energy was supplied through wholesale purchases, half of which were from WAPA hydroelectric facilities.

More that 40 percent of NPPD’s generation sources are Carbon-Free.

In order for NPPD to meet its goal of 10 percent of its generating capacity originating from renewable resources, primarily wind, the District will need to develop 533 megawatts (MW) of total wind generation by 2020. As of 2013, NPPD had a total of 232 MW from seven separate facilities in the State.

Total wind turbine production in Nebraska, as of July 2013, equaled 459.4 megawatts generated from 260 operational wind turbines. The electrical power generated from these turbines could provide power to approximately 165,880 homes year round.
WIND TURBINES AND “NET METERING”

Commercial, large scale wind turbines, or “Wind Conversion Systems,” are being promoted in Nebraska Counties by companies and local property owners alike. Wind towers of up to 400’ in height are typically developed as “wind farms,” where multiple wind towers are constructed in a single area, or linearly along a ridge line, such as Laredo Ridge Wind Farm, east of Petersburg in Boone County, for example. This facility consists of 54 individual 1.5 megawatt (MW) turbines.

As of August, 2009, the State of Nebraska Legislature approved and signed into law, LB 439 (Nebraska State Statute §70-2001 to 2005), which is also referred to as “Net Metering.” This law allows individual residences and businesses to supplement their standard electric service with one, or combinations of, five alternate energy systems, including Solar, Methane, Wind, Biomass, Hydropower and Geothermal. By implementing these types of alternative energy systems, the desire of the individual is to reduce their reliance on public utility systems, potentially by where they generate more electricity than they can use and profit by having the public utility district purchase their excess energy.
The Chappell Planning Commission chose to allow residences and businesses to utilize the provisions of Net Metering, specifically Small Wind Energy Systems. These same small Wind Energy Systems are permissible as Special Uses in each of the Districts of the City Zoning Regulations.

Commercial Wind Energy Conversion Systems, or what are commonly known as “Wind Farms” are potentially permitted as Special Uses in the “AGR General Agricultural” District.

**ENERGY CONSUMPTION**

According to the Nebraska Energy Office, the only available energy consumption statistics by Sector are the State totals. As of 2010, the Industrial Sector consumed 41.8 percent, or more than a third of the Total Energy Consumption of the State of Nebraska. The other three Sectors comprised nearly equal portions, at 17 percent in the Commercial Sector, 19.6 percent for the Residential Sector and 21.6 percent in the Transportation Sector. The Total Energy Consumption, in 2010, was 843.8 trillion British Thermal Units (BTU), which more than doubled, since 1960, when total consumption was 308.3 trillion BTU, a change of 173.7 percent.

**TRENDS IN ENERGY CONSUMPTION**

During the last 49 years, the State of Nebraska, as a whole, has vastly increased energy consumption. The Nebraska Energy Office “Annual Report – 2012,” details the most recent state-wide statistics from 2009. Throughout Nebraska, energy consumption as a percentage share of personnel income has remained constant. In 1970, 11.8 percent of personnel income was spent on energy. As of 2009, 10 percent was spent on energy usage.

Trends in the Total Energy Consumption for the State of Nebraska is mirrored in each of the individual energy categories, coal, natural gas, gasoline and distillate fuel oil (primarily diesel fuel), nuclear power and hydroelectric production. Each of these energy types are detailed between 1960 and 2008, as follows:

- Coal consumption increased from 20 trillion BTUs in 1960 to 249.6 trillion BTUs, as of 2009.
- Natural gas consumption rose and fell during the 49 year period between 1960 and 2009, beginning at 140.4 trillion BTU, peaking in 1973 at 230.7 trillion BTU and by 2009 increasing again back up to 164.4 trillion BTU.
• Gasoline and diesel fuel consumption increased in Nebraska between 1960 and 2008. Gasoline consumption rose by 25 percent, from 78.8 to 99.3 trillion BTU, as of 2009 but peaked in 1978 at 115.9 trillion BTU. However, diesel fuel consumption quadrupled from 24.2 trillion BTU to 85.9 trillion BTU. Petroleum consumption overall peaked in 1978 at 246.1 trillion BTU.

• Nuclear power generation began in Nebraska in 1973 at 6.5 trillion BTU and has increased to 98.6 trillion BTU as of 2009, but peaked in 2007 at 115.7 trillion BTU.

• Renewable energy sources including Biomass, Wood and Wood-Waste, Hydropower and Geothermal varied widely between 1960 (at a total of 13.4 trillion) and 2009 when the category reached its all-time peak in the State of Nebraska at 87.5 trillion BTU.

Access to low-cost financing through the Nebraska Energy Office and locally available low-interest loans to modernize agricultural equipment have led to conservation increases in the Agricultural Sector.

The U.S. Department of Agriculture issued a report in 2008 that concluded that farmers have increased conservation practices. Since the 1970s, total farm energy consumption fell by 26 percent, while farm production increased by 63 percent. This figure is even more significant when the consolidation of farms is taken into account.

In 1966, just 3.1 million acres of Nebraska crop lands were irrigated, but as of 2009, 8.5 million acres were irrigated, by 92,685 active irrigation wells.

Ethanol production in Nebraska has consumed an increasing amount of corn produced and in the process, expanded irrigation practices. In 2010, more than 40 percent of the corn crop was utilized by ethanol facilities across the State.

INCREASED ENERGY COSTS & CONSERVATION

High fuel costs, or limited availability of a particular energy type increases the desire for energy efficiency practices. For example, historic peak prices for natural gas in 2008 motivated farmers to convert natural gas and propane fueled irrigation equipment to electric power; to limit frequency and amount of applications of anhydrous ammonia fertilizer (a natural gas product); and to increase the use of conservation tillage practices to reduce crop cultivation.
ENERGY CONSERVATION POLICIES

The most effective means for Chappell to reduce its total energy consumption in each of the Energy Sectors (and by energy type) is by conservation practices and by promoting the conversion to alternative energy systems when appropriate.

The following is a list of policies to guide energy practices throughout rural Chappell:

- **Promote the use of “Net Metering” or the use of one, or combinations, of the five alternative energy sources to reduce rural residential and agricultural facilities consumption of energy.**
  - Utilize the Chappell Zoning Regulations to control the placement and operation of alternative energy systems.
  - Require compliance with the Accessory or Special Use permit processes so that established conditions are met by the applicant.
  - Promote the development of vocational education opportunities in local high schools, regional trade schools, and in state colleges and universities to educate the current and future workforce in alternative energy design, fabrication of equipment and maintenance.

- Promote the use and placement of large scale Commercial/Utility Grade Wind Energy Conversion Systems, commonly referred to as “Wind Farms.”
  - Utilize the Chappell Zoning Regulations to guide the potential use and placement of large scale Commercial Wind Energy Conversion Systems by a Special Use Permit process.

- As other sources of Alternative Energy Systems are developed or become cost-effective for use in Nebraska, amend Chappell planning documents to locate and control their operation.

- Promote the use of conservation methods to reduce the consumption of Energy Usage in each of the individual sectors including residential, commercial, industrial (agricultural) and transportation.
  - Promote the use of weatherization methods and energy efficient or “green building” materials in conformance with the “LEED” Certified Building techniques.
  - Support and provide incentives for the expanded use of agricultural practices to reduce energy consumption. Techniques such as conservation tillage, high efficiency irrigation equipment and cost effective fuel sources to power irrigation systems.
• Support State and Federal incentive programs to continue to provide low-cost financing to purchase modern agricultural equipment such as low-pressure pivots and no-till equipment. Programs such as the U.S. Department of Agriculture’s Rural Energy for America Program (REAP) that finances irrigation efficiency improvements switching diesel, propane and natural gas pumps to electric.

• Promote the availability of incentives provided by public power districts to develop alternative energy sources for and from agricultural practices. Modern methods such as producing methane gas from livestock confinement facilities to power agricultural equipment, is just one example.

• Promote the expanded use of solar and geothermal exchange energy systems for agricultural applications that power equipment and heat/cool farm buildings.
APPENDIX
One-And-Six Year Plan for Street Improvements.

HANNA:KEELAN ASSOCIATES, P.C.
COMMUNITY PLANNING & RESEARCH
MEMO

TO:     Le moyne Schulz Secretary
         Board Of Public Roads
         Classifications & Standards
         State Of Nebraska
         P O Box 94759
         Lincoln NE 68509-4569

FROM:   Ryan Kavan

RE:     1 & 6 Year Plan - 2013
         Chappell, Nebraska

DATE:   March 4, 2013

NOTES:

Enclosed is the 1 & 6 Year Plan for the City of Chappell.

If you have any questions, please feel free to call.

CC: City of Chappell

F:\projects\1686CHAPPELL\1 & 6 YR2013 1 & 6\Memo to Board of Public Roads.doc
February 19, 2013

2013 UPDATE OF
ONE- AND SIX-YEAR PLAN FOR
STREET IMPROVEMENTS
THE CITY OF CHAPPELL, NEBRASKA

In accordance with the requirements of the Nebraska Board of Public Roads Classifications and Standards, the One- and Six-Year Plan for Street Improvements for the City of Chappell, Nebraska has been updated to reflect current improvement goals of the City.

During 2013 the City of Chappell will proceed with maintenance and project M-200(242). The 2013 Six-Year Plan, which consists of nine (9) street improvement projects is described by the following maps and NBCS forms.
NOTICE OF PUBLIC HEARING

The Governing Body of the City of Chappell, Nebraska will hold the annual hearing to review the City's one year and six year street improvement plans during the regular meeting at 7:15 PM on Tuesday, February 19, 2013 in the Council Chambers at City Hall in Chappell, Nebraska, which meeting will be open to the public.

Any interested persons are invited to attend this public hearing and to present pertinent information, data, or views or to request and complete public knowledge and discussion of said street improvement plans prior to adoption according to law and as provided in Legislative Bill No. 1302, passed by the 1969 Nebraska State Legislature and approved by the Governor.

Ashlea Jepsen
City Clerk
CERTIFICATE OF POSTING

I, Ashlea Jepsen, City Clerk of the City of Chappell, Nebraska, hereby certify that a copy of Notice of the meeting of the Mayor and City council of said City held February 19, 2013, was caused to post by myself in the public places in said City listed below on the 4th day of February 2013.

Deuel County Courthouse
Points West Community Bank
City Hall

Dated this 19th day of February, 2013

[Signature]
Ashlea Jepsen
City Clerk
RESOLUTION 2013-01

WHEREAS The City of Chappell, Nebraska has conducted a public hearing in accordance with the requirements of the Board of Public Roads Classifications and Standards, NOW THEREFORE, be it resolved by the Mayor and City Council that the One- and Six-Year Plan for Streets as amended at said public hearing has been accepted and approved.

CERTIFICATE OF RECORDING OFFICER

The undersigned, duly qualified and acting City Clerk of the City of Chappell, Nebraska does hereby certify that the above resolution was adopted at a legally convened meeting of the City held on February 19, 2013, and further, that such resolution has been fully recorded in the proceedings and records in the office of the City Clerk.

IN WITNESS WHEREOF, I have hereunto set my hand this February 19, 2013.

City Clerk

Notice of public hearing was posted in three public places in the City ten days prior to the public hearing date.

City Clerk
# Board of Public Roads Classifications and Standards

## Form 7 One- and Six-Year Plan
### Highway or Street Improvement Project

<table>
<thead>
<tr>
<th>County:</th>
<th>Deuel</th>
<th>City:</th>
<th>Chappell, Nebraska</th>
<th>Village:</th>
</tr>
</thead>
</table>

**Location Description:**

Wheatland Drive from 2nd Street/Highway 30 to North City Limit

**Existing Surface Type and Structures:** (Such as dirt, gravel, asphalt, concrete, culvert or bridge)

- Asphalt

**Average Daily Traffic:**

\[
\frac{2013}{2033} = \frac{600}{550}
\]

**Classification Type:** (As shown on Functional Classification Map)

- Collector

## PROPOSED IMPROVEMENT

<table>
<thead>
<tr>
<th>Design Standard Number: Municipal</th>
<th>Surfacing</th>
<th>Thickness: PC Concrete 8&quot;</th>
<th>Width: 36'</th>
</tr>
</thead>
<tbody>
<tr>
<td>X Grading</td>
<td>X Concrete</td>
<td>[ ] Right of Way</td>
<td>[ ] Lighting</td>
</tr>
<tr>
<td>[ ] Aggregate</td>
<td>[ ] Curb &amp; Gutter</td>
<td>[ ] Utility Adjustments</td>
<td>[ ]</td>
</tr>
<tr>
<td>[ ] Armor Cost</td>
<td>[ ] Drainage Structures</td>
<td>[ ] Fencing</td>
<td>[ ]</td>
</tr>
<tr>
<td>[ ] Asphalt</td>
<td>[ ] Erosion Control</td>
<td>[ ] Sidewalks</td>
<td>[ ]</td>
</tr>
</tbody>
</table>

**Bridge to Remain in Place:**

- Roadway Width: Length: Type:

**New Bridge:**

- Roadway Width: Length: Type:

**Box Culvert:**

- Span: Rise: Length: Type:

**Culvert:**

- Diameter: Length: Type:

**Bridges and Culverts Sized**

- [ ] Yes
- [ ] N/A
- [ ] Hydraulic Analysis Pending

**Other Construction Features:**

Drainage improvements along the project are needed to reduce storm water impacts to adjacent properties, preserve proposed pavement, and improve driving safety.

## ESTIMATED COST

<table>
<thead>
<tr>
<th>* COUNTY</th>
<th>* CITY</th>
<th>* STATE</th>
<th>* FEDERAL</th>
<th>* OTHER</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>OPTIONAL</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>573.0</td>
</tr>
</tbody>
</table>

**Project Length:** (Nearest Tenth, State Unit of Measure)

- 0.3 miles

**Project Number:** M-200(224)

**Signature:**

[Signature]

Ryan Kavan

Title: Street Superintendent

Date: February 19, 2013

NBES Form 7, Jul 96
Board of Public Roads Classifications and Standards
Form 7 One- and Six-Year Plan
Highway or Street Improvement Project

<table>
<thead>
<tr>
<th>County:</th>
<th>City: Chappell, Nebraska</th>
<th>Village:</th>
</tr>
</thead>
</table>

Location Description:
Washington Avenue from "A" Street to 2nd Street/Highway 30 and approximately 1500' of Drainage Ditch

Existing Surface Type and Structures: (Such as dirt, gravel, asphalt, concrete, culvert or bridge)
Washington Avenue is Asphalt, A Street is Gravel

Average Daily Traffic:
20 13 = 100
20 33 = 150

Classification Type: (As shown on Functional Classification Map)
Local

PROPOSED IMPROVEMENT

<table>
<thead>
<tr>
<th>Design Standard Number:</th>
<th>Surfacings</th>
<th>Thickness: 3&quot; Asphalt</th>
<th>Width:</th>
</tr>
</thead>
<tbody>
<tr>
<td>X Grading</td>
<td>X Concrete</td>
<td></td>
<td>49'</td>
</tr>
<tr>
<td>Aggregate</td>
<td>X Curb &amp; Gutter</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Armor Coat</td>
<td>X Drainage Structures</td>
<td></td>
<td></td>
</tr>
<tr>
<td>X Asphalt</td>
<td>X Erosion Control</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Bridge to Remain In Place:

<table>
<thead>
<tr>
<th>Roadway Width</th>
<th>Length</th>
<th>Type:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

New Bridge:

<table>
<thead>
<tr>
<th>Roadway Width</th>
<th>Length</th>
<th>Type:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Box Culvert:

<table>
<thead>
<tr>
<th>Span</th>
<th>Rise</th>
<th>Length</th>
<th>Type:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Culvert:

<table>
<thead>
<tr>
<th>Diameter</th>
<th>Length</th>
<th>Type:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Bridges and Culverts Sized

<table>
<thead>
<tr>
<th>Yes</th>
<th>N/A</th>
<th>Hydraulic Analysis Pending</th>
</tr>
</thead>
</table>

Other Construction Features:

A new storm sewer outlet would be created along this route, placing new storm sewer pipe under the Washington Avenue pavement. Washington Avenue would be resurfaced with a 3" Asphalt overlay and remain 49' wide from back of curb to back of curb. Drainage improvements are based on a drainage study completed by the City. Intersections would be constructed of PC Concrete.

ESTIMATED COST (in Thousands)

<table>
<thead>
<tr>
<th>COUNTY</th>
<th>CITY</th>
<th>STATE</th>
<th>FEDERAL</th>
<th>OTHER</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>407.0</td>
</tr>
</tbody>
</table>

Project Length: (Nearest Tenth, State Unit of Measure)
0.2 miles

<table>
<thead>
<tr>
<th>Project Number: M-200(225)</th>
</tr>
</thead>
</table>

Signature: Ryan Kavan
Title: Street Superintendent
Date: February 19, 2013

NEPS Form 7, Jul 98
Board of Public Roads Classifications and Standards
Form 7 One- and Six-Year Plan
Highway or Street Improvement Project

County: Dade
City: Chappell, Nebraska
Village: 

Location Description:
Thompson Avenue from Railroad Street to 2nd Street/Highway 30

Existing Surface Type and Structures: (Such as dirt, gravel, asphalt, concrete, culvert or bridge)
Asphalt north of 1st Street, Gravel south of 1st Street

Average Daily Traffic:
20 13 = 100, 20 33 = 150
Classification Type: (As shown on Functional Classification Map)
Local

PROPOSED IMPROVEMENT

<table>
<thead>
<tr>
<th>Design Standard Number:</th>
<th>Municipal</th>
<th>Surfacing</th>
<th>Thickness:</th>
<th>Width:</th>
</tr>
</thead>
<tbody>
<tr>
<td>X Grading</td>
<td>X Concrete</td>
<td>□ Right of Way</td>
<td>□ Lighting</td>
<td></td>
</tr>
<tr>
<td>□ Aggregate</td>
<td>X Curb &amp; Gutter</td>
<td>□ Utility Adjustments</td>
<td>□</td>
<td></td>
</tr>
<tr>
<td>□ Armor Coat</td>
<td>X Drainage Structures</td>
<td>□ Fencing</td>
<td>□</td>
<td></td>
</tr>
<tr>
<td>□ Asphalt</td>
<td>X Erosion Control</td>
<td>□ Sidewalks</td>
<td>□</td>
<td></td>
</tr>
</tbody>
</table>

Bridge to Remain in Place: Roadway Width: Length: Type: 
New Bridge: Roadway Width: Length: Type: 
Box Culvert: Span: Rise: Length: Type: 
Culvert: Diameter: Length: Type: 

Bridges and Culverts Sized □ Yes □ N/A □ Hydraulic Analysis Pending

Other Construction Features:
Additional storm sewer pipe would be installed from 2nd Street/Highway 30 to an existing storm sewer outlet at Railroad Street to relieve a bottleneck in the storm sewer system. Drainage improvements are based on a drainage study completed by the City.

ESTIMATED COST (In Thousands)

<table>
<thead>
<tr>
<th>COUNTY</th>
<th>CITY</th>
<th>STATE</th>
<th>FEDERAL</th>
<th>OTHER</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>502.0</td>
</tr>
</tbody>
</table>

Project Length: (Nearest Tenths, State Unit of Measure) 0.3 miles
Project Number: M-20X(228)

Signature: Ryan Kavan
Title: Street Superintendent
Date: February 19, 2013
Board of Public Roads Classifications and Standards

Form 7 One- and Six-Year Plan
Highway or Street Improvement Project

County: 
City: Chappell, Nebraska 
Village: 

Location Description: 
4th Street from Ochs Avenue to 2nd Street/Highway 30

Existing Surface Type and Structures: (Such as dirt, gravel, asphalt, concrete, culvert or bridge)
Asphalt

Average Daily Traffic:
20 13 = 250
20 33 = 300

Classification Type: (As shown on Functional Classification Map) 
Local

PROPOSED IMPROVEMENT

<table>
<thead>
<tr>
<th>Design Standard Number: Municipal</th>
<th>Surfacing</th>
<th>Thickness: 3&quot; Asphalt</th>
<th>Width: 49</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grading</td>
<td>Concrete</td>
<td>Right of Way</td>
<td>Lighting</td>
</tr>
<tr>
<td>Aggregate</td>
<td>X Curb &amp; Gutters</td>
<td>Utility Adjustments</td>
<td></td>
</tr>
<tr>
<td>Armor Coat</td>
<td>X Drainage Structures</td>
<td>Fencing</td>
<td></td>
</tr>
<tr>
<td>Asphalt</td>
<td>Erosion Control</td>
<td>Sidewalks</td>
<td></td>
</tr>
</tbody>
</table>

Bridge to Remain in Place:
Roadway Width: 
Length: 
Type: 

New Bridge:
Roadway Width: 
Length: 
Type: 

Box Culvert:
Span: 
Rise: 
Length: 
Type: 

Culvert:
Diameter: 
Length: 
Type: 

Bridges and Culverts Sized
Yes
N/A
Hydraulic Analysis Pending

Other Construction Features:
3" Asphalt mill and overlay

ESTIMATED COST
(In Thousands) 

<table>
<thead>
<tr>
<th>COUNTY</th>
<th>CITY</th>
<th>STATE</th>
<th>FEDERAL</th>
<th>OTHER</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>194.0</td>
</tr>
</tbody>
</table>

Project Length: (Hundred Tenth, State Unit of Measure) 
0.3 miles

Project Number: M-200(227)

Signature: Ryan Kavan 
Title: Street Superintendent 
Date: February 19, 2013

NEBR Form 7, Jul 99
## Board of Public Roads Classifications and Standards
### Form 7 One- and Six-Year Plan
#### Highway or Street Improvement Project

**County:**

**Deuel**

**City:**

**Chappell, Nebraska**

**Village:**

Location Description:

Court Avenue from Railroad Street to 2nd Street/Highway 30

**Existing Surface Type and Structures:** (Such as dirt, gravel, asphalt, concrete, culvert or bridge)

Asphalt

**Average Daily Traffic:**

\[
\begin{align*}
20 & \quad 13 & = & \quad 100 \\
20 & \quad 33 & = & \quad 150
\end{align*}
\]

**Classification Type:** (As shown on Functional Classification Map)

Local

### PROPOSED IMPROVEMENT

<table>
<thead>
<tr>
<th>Design Standard Number: Municipal</th>
<th>Surfacing</th>
<th>Thickness: 6&quot; PC Concrete</th>
<th>Width: 36&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Grading                          | X         | Concrete                 | Right of Way | Lighting |              |
| Aggregate                        | X         | Curb & Gutter            | Utility Adjustments |          |              |
| Armor Coat                       | X         | Drainage Structures      | Fencing      |          |              |
| Asphalt                          | X         | Erosion Control          | Sidewalks    |          |              |

**Bridge to Remain in Place:**

Roadway Width: 

Length: 

Type: 

**New Bridge:**

Roadway Width: 

Length: 

Type: 

**Box Culvert:**

Span: 

Rise: 

Length: 

Type: 

**Culvert:**

Diameter: 

Length: 

Type: 

### Bridges and Culverts Sized

- [ ] Yes
- [ ] N/A
- [ ] Hydraulic Analysis Pending

### Other Construction Features:

Remove and replace asphalt pavement with Concrete Pavement and add storm sewer to improve drainage along Court, 2nd Street/Highway 30 ad 1st Street.

### ESTIMATED COST

(In Thousands)

<table>
<thead>
<tr>
<th>COUNTY</th>
<th>CITY</th>
<th>STATE</th>
<th>FEDERAL</th>
<th>OTHER</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>555.0</td>
</tr>
</tbody>
</table>

**Optional**

**Project Length:** (Nearest Tenth; State Unit of Measure)

0.3 miles

**Project Number:**

M-200(228)

**Signature:**

Ryan Kavan

Title: Street Superintendent

Date: February 19, 2013
Board of Public Roads Classifications and Standards

Form 7 One- and Six-Year Plan

Highway or Street Improvement Project

County: 
City: Chappell, Nebraska
Village: 

Location Description:
6th Street from Thompson Avenue to Hayward Avenue

Existing Surface Type and Structures: 
(Such as dirt, gravel, asphalt, concrete, culvert or bridge)
Gravel

Average Daily Traffic:
20 \(\times\) 13 = 100, 20 \(\times\) 33 = 660

Classification Type: (As shown on Functional Classification Map)
Local

PROPOSED IMPROVEMENT

Design Standard Number:
Municipal

Surfacing
Thickness: 6\(^{\text{h}}\) PC Concrete
Width: 36'

- [X] Grading
- [X] Concrete
- [ ] Right of Way
- [ ] Lighting
- [ ] Aggregate
- [X] Curb & Gutter
- [ ] Utility Adjustments
- [ ] Asphalt
- [X] Drainage Structures
- [ ] Fencing
- [X] Erosion Control
- [ ] Sidewalks

Bridge to Remain in Place: Roadway Width: 
Length: Type:
New Bridge: Roadway Width: 
Length: Type:
Box Culvert: Span: Rise: Length: Type:
Culvert: Diameter: Length: Type:

Bridges and Culverts Sized
[ ] Yes
[ ] N/A
[ ] Hydraulic Analysis Pending

Other Construction Features:
Improving gravel street to PC concrete surfacing with curb and gutter.

ESTIMATED COST
(in Thousands)

*OPTIONAL

- COUNTY
- * CITY
- * STATE
- * FEDERAL
- * OTHER
- TOTAL

166.0

Project Length: (Nearest Tenth, State Unit of Measure)
0.2 miles

Project Number: M-200(233)

Signature: Ryan Kavan
Title: Street Superintendent
Date: February 19, 2013
Board of Public Roads Classifications and Standards
Form 7 One- and Six-Year Plan
Highway or Street Improvement Project

<table>
<thead>
<tr>
<th>County:</th>
<th>City:</th>
<th>Village:</th>
</tr>
</thead>
<tbody>
<tr>
<td>D尤尔</td>
<td>Chappell, Nebraska</td>
<td></td>
</tr>
</tbody>
</table>

Location Description:
2nd Street (Downtown Study Area (Babcock - Matlock)

Existing Surface Type and Structures: (Such as dirt, gravel, asphalt, concrete, culvert or bridge)
Asphalt

Average Daily Traffic:

| 20 | 13 | 33 | = 150 |

Classification Type: [As shown on Functional Classification Map]
Local

PROPOSED IMPROVEMENT

<table>
<thead>
<tr>
<th>Design Standard Number:</th>
<th>Thickness:</th>
<th>Width:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Municipal</td>
<td></td>
<td>49&quot;</td>
</tr>
</tbody>
</table>

- ☐ Grading
- ☐ Aggregate
- ☐ Armor Cost
- ☐ Asphalt
- ☑ Concrete
- ☑ Curb & Gutter
- ☑ Drainage Structures
- ☐ Erosion Control
- ☐ Right of Way
- ☑ Utility Adjustments
- ☐ Fencing
- ☐ Sidewalks

Bridge to Remain in Place:

- ☐ Roadway Width:  
- Length:  
- Type:  

New Bridge:

- ☐ Roadway Width:  
- Length:  
- Type:  

Box Culvert:

- ☐ Span:  
- Rise:  
- Length:  
- Type:  

Culvert:

- ☐ Diameter:  
- Length:  
- Type:  

Bridges and Culverts Sized

- ☑ Yes
- ☐ N/A
- ☐ Hydraulic Analysis Pending
- ☐ Other

Other Construction Features:

- Improving Downtown area with new sidewalks, street & pedestrian lights, & landscaping.

<table>
<thead>
<tr>
<th>ESTIMATED COST</th>
<th>COUNTY</th>
<th>CITY</th>
<th>STATE</th>
<th>FEDERAL</th>
<th>OTHER</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>(In Thousands)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>575.2</td>
</tr>
</tbody>
</table>

*OPTIONAL

Project Length: (Nearest Tenth, State Unit of Measure)
0.2 miles

Project Number: M-200(239)

Signature: [Signature]
Ryan Kavan
Title: Street Superintendent
Date: February 19, 2013

NEBPS Form 7, Jul 96
# Board of Public Roads Classifications and Standards

## Form 7 One- and Six-Year Plan

### Highway or Street Improvement Project

<table>
<thead>
<tr>
<th>County:</th>
<th>City:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deuel</td>
<td>Chappell, Nebraska</td>
</tr>
</tbody>
</table>

**Location Description:**

Vincent Street (Railroad St. - 3rd St.)

**Existing Surface Type and Structures:** (Such as dirt, gravel, asphalt, concrete, culvert or bridge)

- Asphalt

**Average Daily Traffic:**

\[
20 \times 13 \quad - \quad 100 \quad - \quad 20 \times 33 \quad = \quad 150
\]

**Classification Type:** (As shown on Functional Classification Map)

- Local

### Proposed Improvement

<table>
<thead>
<tr>
<th>Design Standard Number: Municipal</th>
<th>Thickness:</th>
<th>Width:</th>
</tr>
</thead>
<tbody>
<tr>
<td>X Grading</td>
<td>X Concrete</td>
<td>X Right of Way</td>
</tr>
<tr>
<td>X Aggregate</td>
<td>X Curb &amp; Gutter</td>
<td>X Utility Adjustments</td>
</tr>
<tr>
<td>X Armor Coat</td>
<td>X Drainage Structures</td>
<td>X Fencing</td>
</tr>
<tr>
<td>X Asphalt</td>
<td>X Erosion Control</td>
<td>X Sidewalks</td>
</tr>
</tbody>
</table>

**Bridge to Remain in Place:**

**New Bridge:**

- Roadway Width: Length: Type:

**Box Culvert:**

- Span: Rise: Length: Type:

**Culvert:**

- Diameter: Length: Type:

**Bridges and Culverts Sized**

- Yes
- N/A
- Hydraulic Analysis Pending

**Other Construction Features:**

- Improving Sidewalks, lighting, & streetscape. Downtown Study area

### Estimated Cost

<table>
<thead>
<tr>
<th>COUNTY</th>
<th>CITY</th>
<th>STATE</th>
<th>FEDERAL</th>
<th>OTHER</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>*</td>
<td></td>
<td></td>
<td></td>
<td>242.0</td>
</tr>
</tbody>
</table>

**Optional**

- Project Length: (Nearest Tenth, State Unit of Measure)
- Project Number: M-200(240)

**Signature:**

Ryan Kavan
Title: Street Superintendent
Date: February 19, 2013
**Board of Public Roads Classifications and Standards**

**Form 7 One-and Six-Year Plan**

**Highway or Street Improvement Project**

<table>
<thead>
<tr>
<th>County:</th>
<th>City: Chappell, Nebraska</th>
<th>Village:</th>
</tr>
</thead>
</table>

**Location Description:**
Babcock Ave. (2nd-6th), Hayward Ave. (1st-2nd & 5th-8th), Cutter Ave. (2nd-3rd & 5th-6th), Thompson Ave. (6th-7th), Court Ave. (4th-7th), Dana Ave. (A-3rd & 4th-6th), Lincoln Ave. (A-4th & 5th-6th), 3rd St. (Hayward-Thompson), 4th St. (Hayward-Dana & Lincoln-300 East Lincoln Corp Limits), 5th St. (Ochs-Washington), 6th St. (Thompson-Lincoln)

**Existing Surface Type and Structures:** (Such as dirt, gravel, asphalt, concrete, culvert or bridge)
Asphalt

**Average Daily Traffic:**
20 13 = 100, 20 33 = 150

**Classification Type:** (As shown on Functional Classification Map)
Local

**PROPOSED IMPROVEMENT**

<table>
<thead>
<tr>
<th>Design Standard Number:</th>
<th>Municipal</th>
<th>Chip Seal</th>
<th>Thickness:</th>
<th>Width:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>0.5&quot;</td>
<td>48&quot;</td>
</tr>
</tbody>
</table>

- [ ] Grading
- [ ] Concrete
- [ ] Right of Way
- [ ] Lighting

- [ ] Aggregate
- [ ] Curb & Gutter
- [ ] Utility Adjustments

- [ ] Armor Coat
- [ ] Drainage Structures
- [ ] Fencing

- [X] Asphalt
- [ ] Erosion Control
- [ ] Sidewalks

**Bridge to Remain in Place:**
Roadway Width: [ ] Length: [ ] Type:

**New Bridge:**
Roadway Width: [ ] Length: [ ] Type:

**Box Culvert:**
Span: [ ] Rise: [ ] Length: [ ] Type:

**Culvert:**
Diameter: [ ] Length: [ ] Type:

**Bridges and Culverts Sized**
[ ] Yes [ ] N/A [ ] Hydraulic Analysis Pending

**Other Construction Features:**
Improving Asphalt streets with a layer of Chip Seal

**ESTIMATED COST**

<table>
<thead>
<tr>
<th>COUNTY</th>
<th>CITY</th>
<th>STATE</th>
<th>FEDERAL</th>
<th>OTHER</th>
<th>TOTAL</th>
</tr>
</thead>
</table>

(Note: All costs in thousands)

**Optional**

<table>
<thead>
<tr>
<th>Project Length: (Nearest Tenth, State Unit of Measure)</th>
<th>Project Number:</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.4 miles</td>
<td>M-200(242)</td>
</tr>
</tbody>
</table>

**Signature:**

Ryan Kavan
Street Superintendent
February 19, 2013
<table>
<thead>
<tr>
<th>PRIORITY NUMBER</th>
<th>PROJECT NUMBER</th>
<th>LENGTH-MILES (Nearest Tenth)</th>
<th>ESTIMATED COST (Thousands)</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Maintenance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>M-200(242)</td>
<td>3.4</td>
<td>135.0</td>
<td></td>
</tr>
</tbody>
</table>

**CITY:** Chappell, Nebraska

**SIGNATURE:**

**TITLE:** Street Superintendent

**DATE:** February 19, 2013
<table>
<thead>
<tr>
<th>PRIORITY NUMBER</th>
<th>PROJECT NUMBER</th>
<th>LENGTH</th>
<th>UNIT OF (Nearest Tenth)</th>
<th>ESTIMATED COST (Thousands)</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Maintenance</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>M-200(242)</td>
<td>3.4</td>
<td></td>
<td>135.0</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>M-200(224)</td>
<td>0.3</td>
<td></td>
<td>573.0</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>M-200(225)</td>
<td>0.2</td>
<td></td>
<td>407.0</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>M-200(226)</td>
<td>0.3</td>
<td></td>
<td>502.0</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>M-200(227)</td>
<td>0.3</td>
<td></td>
<td>194.0</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>M-200(228)</td>
<td>0.3</td>
<td></td>
<td>556.0</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>M-200(233)</td>
<td>0.2</td>
<td></td>
<td>166.0</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>M-200(239)</td>
<td>0.2</td>
<td></td>
<td>575.2</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>M-200(240)</td>
<td>0.2</td>
<td></td>
<td>242.0</td>
<td></td>
</tr>
<tr>
<td>COUNTY:</td>
<td>Deuel</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CITY:</td>
<td>Chappell, Nebraska</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VILLAGE:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PROJECT NUMBER</td>
<td>LENGTH</td>
<td>UNIT OF MEASURE</td>
<td>PROJECTED COST (Thousands)</td>
<td>CONTRACT PROJECT</td>
<td>OWN FORCES</td>
</tr>
<tr>
<td>Maintenance</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

**SIGNATURE:**

Ryan Kavan

**TITLE:**

Street Superintendent

**DATE:**

February 19, 2013