I. INTRODUCTION AND PURPOSE

The purpose of the Transportation Chapter is to provide direction for the City, land owners and developers on street improvements and new infrastructure to support growth. This Chapter provides the framework for decisions regarding the nature of street improvements necessary to achieve safety, adequate access and mobility. The primary goal of this Chapter is to establish local policies, standards, and guidelines to implement the future street network that is coordinated with respect to county, regional, and state plans in such a way that the transportation system enhances quality economic and residential development within the City of Lonsdale. To accomplish these objectives, the Transportation Chapter provides information about:

- The functional hierarchy of streets and roads related to access and capacity requirements;
- Existing and potential deficiencies of the existing arterial-collector street system;
- A future arterial-collector street system capable of accommodating traffic as the city grows;
- Access management policies and intersection controls; and
- The importance of pedestrian/bicycle trail and sidewalk system along the roadway system.

II. EXISTING TRANSPORTATION SYSTEMS

1. Transportation System. The existing street system within Lonsdale consists of minor arterial, collector and local streets. Jurisdiction of these roadways consists of state, county, and city owned facilities. The Existing Transportation Classification System is depicted on Map 9-1. The Future Functional Classification System Map is illustrated on Map 9-2. Additional information on roadways within the City is included in Sections III through VIII of this Chapter.

2. Air. Lonsdale has access to air transportation with several airports within a one hour radius of the city. Lonsdale is 30 miles south of the Minneapolis-St. Paul International Airport, 42 miles from the Mankato Regional Airport, 21 miles from the Airlake Airport in Lakeville, 41 miles from the Waseca Municipal Airport, 34 miles from the minor airstrip in Le Sueur, and 17 miles from the Faribault Municipal Airport. Lonsdale is not located within any airport noise exposure zones.

3. Public Transit. There currently are no public transit options within Lonsdale. Hiawathaland Transit provides bus service within Goodhue, Rice, and Wabasha Counties and operates in the cities of Cannon Falls, Elgin, Faribault Kellogg, Lake City, Mazeppa, Northfield, Plainview, Red Wing, Wabasha, Wanamingo, and Zumbrota, and the Townships of Leon, Stanton, Randolph, Florence, Greenfield, Reeds Landing, Featherstone, Hay Creek, and Wacouta. As the City continues to grow, the need to provide public transit may need to be evaluated.

Trails. The City of Lonsdale has constructed a looped trail around the city. Chapter 7 of this Plan includes maps with existing and proposed trails. Chapter 7 includes additional
information on the Czech Area Heritage Trail, the Mill Tows State Trail and other regional trails. Presently the City has approximately 8.6 miles of paved trails, not including the sidewalks that exist in the downtown district along Main Street and on a few side streets.

III. TRANSPORTATION ISSUES

During the preparation of the Comprehensive Plan, input was sought from the public relating to various areas of transportation. Following are the results of from 390 surveys.

**Physical Condition of Roads.** Residents were asked to rate the physical condition of roads in the City. Over one-half rated the streets as “Good”. Nearly 1/3 rated them as “Excellent” or “Very Good”. Following is a breakdown of the responses:

<table>
<thead>
<tr>
<th>How would you rate the physical condition of roads in the City?</th>
<th>Response Percent</th>
<th>Response Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Excellent</td>
<td>3.9%</td>
<td>15</td>
</tr>
<tr>
<td>2. Very Good</td>
<td>28.6%</td>
<td>110</td>
</tr>
<tr>
<td>3. Good</td>
<td>51.0%</td>
<td>196</td>
</tr>
<tr>
<td>4. Fair</td>
<td>5.7%</td>
<td>22</td>
</tr>
<tr>
<td>5. Poor</td>
<td>1.3%</td>
<td>5</td>
</tr>
<tr>
<td>If “Fair” or “Poor” please describe your concern in detail:</td>
<td>9.4%</td>
<td>36</td>
</tr>
<tr>
<td>answered question</td>
<td></td>
<td>384</td>
</tr>
<tr>
<td>skipped question</td>
<td></td>
<td>6</td>
</tr>
</tbody>
</table>

**Quality of Snowplowing.** Residents were asked to rate the quality of snowplowing on City streets. Again, a majority rated the quality as “Good”, followed by “Very Good” and “Excellent”. Following are responses.
How would you rate the quality of snowplowing on city streets?

<table>
<thead>
<tr>
<th>Answer Options</th>
<th>Response Percent</th>
<th>Response Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excellent</td>
<td>11.3%</td>
<td>43</td>
</tr>
<tr>
<td>Very Good</td>
<td>26.7%</td>
<td>102</td>
</tr>
<tr>
<td>Good</td>
<td>34.8%</td>
<td>133</td>
</tr>
<tr>
<td>Fair</td>
<td>6.8%</td>
<td>26</td>
</tr>
<tr>
<td>Poor</td>
<td>2.1%</td>
<td>8</td>
</tr>
<tr>
<td>If “Fair” or “Poor”, please describe your concern in detail.</td>
<td>18.3%</td>
<td>70</td>
</tr>
</tbody>
</table>

Physical condition of sidewalks and trails. Similarly, residents rank the physical condition of sidewalks and trails as “Good” to “Very Good”. The results of the survey follow:

How would you rate the physical condition of the sidewalk and trail system in Lonsdale?

<table>
<thead>
<tr>
<th>Answer Options</th>
<th>Response Percent</th>
<th>Response Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Excellent</td>
<td>12.3%</td>
<td>47</td>
</tr>
<tr>
<td>2. Very good</td>
<td>33.1%</td>
<td>126</td>
</tr>
<tr>
<td>3. Good</td>
<td>36.2%</td>
<td>138</td>
</tr>
<tr>
<td>4. Fair</td>
<td>3.9%</td>
<td>15</td>
</tr>
<tr>
<td>5. Poor</td>
<td>1.0%</td>
<td>4</td>
</tr>
<tr>
<td>If “Fair” or “Poor”, please describe your concern in detail.</td>
<td>13.4%</td>
<td>51</td>
</tr>
</tbody>
</table>

answered question 381
skipped question 9
Residents were also asked to provide input on transportation issues. The top issues identified included:

- TH 19 and CSAH 4 road alignment
- 8th Avenue and TH 19 - Pedestrian crossing concerns; need to add a sign “Cross Traffic Does Not Stop”
- Sidewalk construction and expansion along Main Street needed.
- Birch St. NE and 8th Avenue NE - site visibility is impaired with a transformer in the corner.
- Need for handicap accessible parking on TH 19
- Visibility at the intersection of TH 19 and Main St.
- Lighting along the trail is needed.
- Transitioning or lowering the speed limit as you enter the City along Highway 19, from the east.

The City is encouraged to address these issues as a part of their capital improvement plan.

The Rice County Transportation Plan, 2006, also identified special transportation issues. These are as follows:

**County State Aid Highway 4 Bypass**

The Rice County transportation planning process identified a possible roadway project which would re-route CSAH 4 to the west from south of Idaho Street to TH 19 as it enters Lonsdale from the north. This approach would remove a significant amount of regional “through” traffic from the western portions of Lonsdale, and would allow regional traffic to move more efficiently in the vicinity of Lonsdale. The City supports the bypass concept, and has joined with the County to jointly study alignment and design options for such a project.
Highway 19/Main Street Intersection
Highway 19 is an important regional roadway, carrying 5,400 to 6,400 vehicles per day through Lonsdale. As its name implies, Main Street represents the traditional primary commercial center for the town. There currently are stop signs on the Main Street legs of the intersection, but not the TH 19 legs, protecting the mobility along this A Minor Arterial. City residents considered this to be a problem intersection due primarily to delay and safety issues associated with trying to cross TH 19. At the request of the City, MnDOT performed a study to assess the potential justification of a traffic signal at this location in 2002. Based on their analysis, MnDOT concluded that traffic levels did not yet meet warrants to justify a traffic signal (or 4-way stop). MnDOT recommended various measures, many of which have been implemented since the study. Improvements made in the past 10 years have included the elimination of parking on the south side of the intersection, movement of parking along TH 19 in the northeast portion of the intersection, and creation of a TH 19 center turn lane. Due to inadequate space, a westbound right turn lane (turning onto northbound Main Street) using the area from restricted parking the northeast portion of the intersection, could not be constructed, as recommended by the study.

Highway 19/CSAH 4/3rd Avenue Intersection
This intersection currently has a poor design for the following reasons: a) it is multi-legged (i.e. more than four), and b) it there is a high degree of skew between CSAH 4 (Railway Street) and TH 19. This was the number one transportation issue identified in the Resident Survey completed as a part of the Comprehensive Plan update. As Lonsdale grows and traffic levels increase, this design will become increasingly unacceptable. The following map illustrates the location of the intersection in question.
The Lonsdale Transportation Plan included the following recommendations for this intersection:

- Close 3rd Avenue Southwest access to CSAH 4/TH 19 with a cul-de-sac
- North of TH 19, close Railway Street access to TH 19 with a cul-de-sac

These improvements will help accomplish the overall goal of limiting/managing access to TH 19 in a manner which MnDOT supports and which improves safety levels for Lonsdale residents. It also reduces the skew issues associated with the intersection by routing existing Railway Street traffic from the north leg of the intersection down 2nd Avenue NW.

In addition, the Lonsdale Transportation Plan recommends future analysis of realigning CSAH 4/Railway Street to the west such that its intersection with TH 19 would be west of the existing location, and would be more squared to this arterial roadway. The outcome of the CSAH 4 bypass work referenced previously would have significant bearing on this potential improvement alternative.

Stop Sign Locations
An issue which came up during discussions with City officials and through public involvement as part of the Lonsdale transportation planning process involves stop sign placement. The current locations of various stop signs may be undesirable. Some of the stop signs appear to have been placed in locations to slow overall traffic speeds on collector-type roadways. This goes against standard traffic engineering practice and these locations should be reviewed. In general, there does not appear to be a systematic overall “game plan” to the placement of stop signs within the City. The Lonsdale Transportation Plan will provide guidance on the assessment of existing stop sign locations and the implementation of a more systematic and effective approach to serve the overall city street system.

Speed Limit on TH 19
It has been suggested the speed limit transition on TH 19 to locations further away from the center of town. As the City grows to the east and west, the higher speed limits will be moved in each direction. This will occur with development in the area.
IV. FUNCTIONAL CLASSIFICATIONS

This section outlines the Functional Classification System for the transportation system in Lonsdale.

1. **Roadway Functional Classification System.** Functional Classification of a roadway system involves determining what function each roadway should be performing with regard to travel within and through the City. The intent of a functional classification system is the creation of a roadway hierarchy that collects and distributes traffic from local roadways and collectors to arterials in a safe and efficient manner. Such classification aids in determining appropriate roadway widths, speed limits, intersection control, design features, accessibility and maintenance priorities. Functional classification helps to ensure that non-transportation factors, such as land use and development, are taken into account in planning and design of the roadway system.

A balanced system is desired, yet not always attainable due to existing conditions and characteristics. The criteria of the functional classification system are intended to be guidelines and are to be applied when plans are developed for the construction or reconstruction of a given classified route. It can and does occur that different roadways with very similar design characteristics may have different functional classifications. Some roadways, for a short segment, may carry higher volumes than a roadway with a higher classification. Spacing guidelines may not follow recommendations for a variety of reasons such as topography, land use type and density, and environmental concerns.

The two major considerations in the classification of roadway networks are access and mobility. Mobility is of primary importance on arterials, thus limitation of access is a necessity. Collector Roadways move traffic from local streets to arterials and minor arterials. Limiting direct access onto collector roadways is also encouraged. The primary function of a local roadway, however, is the provision of access, which in turn limits mobility. The extent and degree of access control is a very important factor in the function of a roadway facility. The functional classification types utilized are dependent upon one another in order to provide a complete system of streets and highways.

Per the 2006 Rice County Transportation Plan, and as illustrated on Map 9-1, following are the functional classification of roadways in Lonsdale:

**A Minor Arterials- TH 19 in Lonsdale is an A-Minor Arterial**
- Primary Purpose: mobility

**Collector Roadways - County State Aid Highway (CSAH) 4 and CSAH 2.**
- Primary Purpose: mobility of traffic from local streets to minor arterials.

**Local Streets - Most roadways in Lonsdale are classified as local streets.**

The 2006 Rice County Transportation Plan recommends a future Roadway Jurisdictional Transfer of CR 54 on the NE side of the City’s growth boundary, from the County to the City, or local jurisdiction. The location of this roadway is illustrated on the following map.
V. FUTURE ROADWAY NETWORK

The existing daily traffic volume data for the primary roadways in the City of Lonsdale has been obtained from traffic flow maps from 2010 from the Minnesota’s Department of Transportation. These volumes, shown on Map 9-3, provide an indication of the daily volumes on these facilities and are updated periodically.

It is anticipated that Lonsdale will continue to grow into the foreseeable future, as indicated in Chapter 3, Demographics. Based on population projections and proposed land uses, forecasted traffic volumes are also projected. This assists the City in determining when roadways may reach capacity. Using regional forecasting information generated as part of the Rice County planning process, in conjunction with traffic generation analysis based upon the 2040 Lonsdale land use plan, the Lonsdale Transportation Plan provides estimated 2040 traffic levels on the primary Lonsdale roadways. This information is summarized on Map 9-4.

In order to accommodate this growth, the existing roadway system will need to be expanded and improved accordingly. Map 9-5 depicts a recommended 2040 roadway network. The proposed street network will allow on-going City (and County) roadway projects to be designed within a structured and systematic context. As private developers plan and propose subdivisions in Lonsdale, they will be able to design their street elements within a known future system, thus improving the efficiency of individual projects, as well as the overall network.
VI. STANDARDS AND GUIDELINES

Design Standards
A system of design guidelines is an effective tool to help provide safe, efficient, and consistent roadway networks. Some situations may require additional analysis due to unusual or unforeseen conditions, but established baseline standards will minimize design uncertainties in most circumstances.

The City’s Subdivision Ordinance, Design Standards, require, “The street layout of every subdivision shall be in conformity with the city's transportation plan, and shall provide for the continuation of major streets, which serve property contiguous to the subdivision. Street networks shall provide ready access for fire and other emergency vehicles, and the Planning and Zoning Commission may require additional access points if such are found to be beneficial or necessary to protect the public safety.”

1 Rice County Transportation Plan, Bolton & Menk, 2005.
The Lonsdale Subdivision Ordinance also requires a six-foot wide sidewalk on both sides of a street in commercial areas, or a ten-foot wide trail if designated in the Comprehensive Plan. Within industrial areas, a six foot wide sidewalk or ten foot wide trail is required to provide access to schools, parks and other destination points. In residential subdivisions, a six foot wide sidewalk on at least one side of local streets is required. Along collector roads, sidewalks are required on both sides of the residential street, unless there is a ten foot wide trail. Sidewalks are not required on cul-de-sacs.

Access management guidelines

Access to the roadway system serving the City should be appropriately controlled in terms of driveway openings and side street intersections. Access management is based upon the roadway functional classification system discussed previously. Because arterial roadways serve relatively long, high speed trips, access to arterials is limited accordingly. Too many driveways and intersecting streets can easily disrupt safety and operational characteristics of arterial roadways. Conversely, the purpose of local streets is to provide connections to adjacent land uses with relatively short, low speed trips. Access to local streets, thus, is generally not restricted. Collector roadways fall between arterials and collectors in terms of transportation function and associated restrictions on access.

Access management guidelines allow the City discretion and negotiating authority regarding individual access decisions. Individual circumstances may warrant occasional exceptions from these guidelines. However, any such exceptions would have to be supported with comprehensive traffic engineering analysis, as well as thorough discussions with City staff and representatives as appropriate.

VII. TRANSPORTATION GOALS

In order to provide a safe and efficient transportation system, the City is committed to the following goals. Such goals are dependent upon the ability to finance the components needed.

Goals

1. Provide a transportation system that serves the existing and future access and mobility needs of the City.

2. Provide a safe and efficient transportation system that is cost effective, including a street and trail improvement and maintenance program.

3. Ensure that the transportation system, in the implementation phases, is as environmentally sensitive as possible, taking into account wetlands, steep slopes and other natural resources.

4. Provide a coordinated transportation system with respect to regional and county’s plans.

5. Provide a transportation system that supports multi-modal transportation whenever and wherever feasible and advantageous.

6. Provide and support a transportation system that enhances quality economic development within the City.
7. Provide a transportation system which preserves the downtown and enhances highway commercial development.

8. Encourage a grid-like street pattern.

9. Discourage the use of long cul-de-sacs, except where it is impractical to provide “through” connecting streets due to environmental or other factors.

10. Continually update the capital improvement program to include street projects for the upcoming five years and include projects such as the Highway 19/CSAH 4/3rd Avenue Intersection, sidewalks along Main Street, lighting along the trail, 8th Avenue and TH 19 – signage noting, Cross Traffic Does Not Stop”, etc.

11. Review the desired width of streets in new subdivisions, as a part of a Subdivision Ordinance Update.

12. In future analysis, explore options for improving non-motorized access along and across Highway 19.

13. In future analysis, assess design issues and alternatives for the Fig Street/TH19/CSAH 2 intersection.

14. If the elementary school expands to a K-6, versus K-4, in the future, seek Safe Routes to School Grants to expand walking and biking paths.

15. Update the 2006 Transportation Plan as growth occurs and/or there are changes in land use, to ensure transportation needs are being addressed proactively.

16. Complete Walking and Bicycle Audits, evaluating the city’s sidewalk and trail systems.

17. Research the demand for public transportation services.

VIII. TRANSPORTATION FUNDING

There are a number of various funding mechanisms available to support transportation projects these include the following:

1. MnDOT Funds. The State of Minnesota has funds available to assist with cooperative projects which increase safety and mobility. Improvements to TH 19 may be eligible for cooperative funding projects. The State of Minnesota, through the gas tax and license fees, collects funds to be used to construct and maintain the State’s transportation system. Most of the funds collected are distributed for use on the State’s Trunk Highway (TH) system, the County State Aid Highway (CSAH) system and the Municipal State Aid Street (MSAS) system. When a city’s population goes above 5,000 they become eligible to receive a portion of the MSAS funding. Lonsdale is anticipated to reach 5,000 in population between 2025 and 2030.

2. County Road Project Participation. Rice County has adopted a Cost Participation Policy. For cities under 5,000 in population, the County will fund 100% of many of the construction components, with the City responsible for water and sewer modifications,
other utilities and street lighting, intersecting streets that are outside of the county right-of-way, new sidewalks, replacement of trees and shrubs in the right-of-way and new landscaping.

3. **New Street Development.** The City of Lonsdale’s policy, at the time of this Comprehensive Plan update, requires developers to fund the entire cost of minor and major collector streets, as well as local streets as a part of their development fees.

4. **Assessments.** The City currently has an assessment policy for reconstruction projects. Benefiting properties are assessed ___% of the project cost.

5. **Grants.** In 2014, the City of Lonsdale received a Safe Routes to School Planning Grant. Region 9 Development Commission administered the grant on behalf of the City of Lonsdale. Safe Routes to School Grants are available for construction of trails and sidewalks leading to school facilities.