

2003 Comprehensive Plan

Transportation



Overview

Transportation is one of the City's largest infrastructure investments and is one of the more visible infrastructures our residents and persons passing through our community observe. All citizens are affected by the City's transportation system, whether it is due to congestion, maintenance, improvements, signalization or its lack of adequate connectivity throughout the community. The fact that our street system is so observable lends itself to countless hours of discussion and debate, such as the unacceptable practice of chip and seal as a viable maintenance practice, right-of-way reservation and the inefficiency of not having an adequate east-west circulation pattern. Nixa's residents identified these and other transportation-related issues in the *2001 Citizen Survey*. Due to the significance of the City's transportation system, it is imperative that policies and strategies be adopted, through the comprehensive planning process, that accommodate a response to constituents' transportation-related perceptions and needs.

The City recognizes the automobile as the primary means of its citizens' mode of travel. Therefore, streets – construction, maintenance, operation, functionality, preservation of the level of service and reservation of future corridor expansion – are the primary focus of the City's transportation interests. Ideally, the City of Nixa's transportation system is designed and built for maximum efficiency, serves all travel demands, provides safety to its users, and, where possible, supports the integration of other alternative modes of transportation. The City's continued growth, where its boundaries constantly expand, also necessitates that the City continuously participate in a regional planning forum where outside assistance would provide help in addressing the City's long-range transportation needs.

The City of Nixa's transportation planning efforts must take into consideration previously adopted policies and decisions when dealing with current and future transportation issues. Transportation planning needs to be comprehensive. In reviewing and planning for the City transportation infrastructure, the City will not only assess the physical street, but will also examine additional issues related to transportation, including but not limited to:

- Environmental impacts;
- Maintaining neighborhood quality of life;
- Maximize efficiency of streets without hindering economic development;
- Stakeholder involvement in the process;

- Responding to the needs of citizens; and
- Accommodating the appropriate land use in accordance with the Comprehensive Plan’s goals, objectives, strategies and policies.

Another important consideration of a complete transportation system is non-vehicular, such as bicycles and pedestrians. While emphasis is placed on vehicular traffic in Nixa, attention must be paid to the safety and well-being of Nixa’s citizens by planning for these alternative modes of transportation where and when they can be implemented.

Strategic Issues

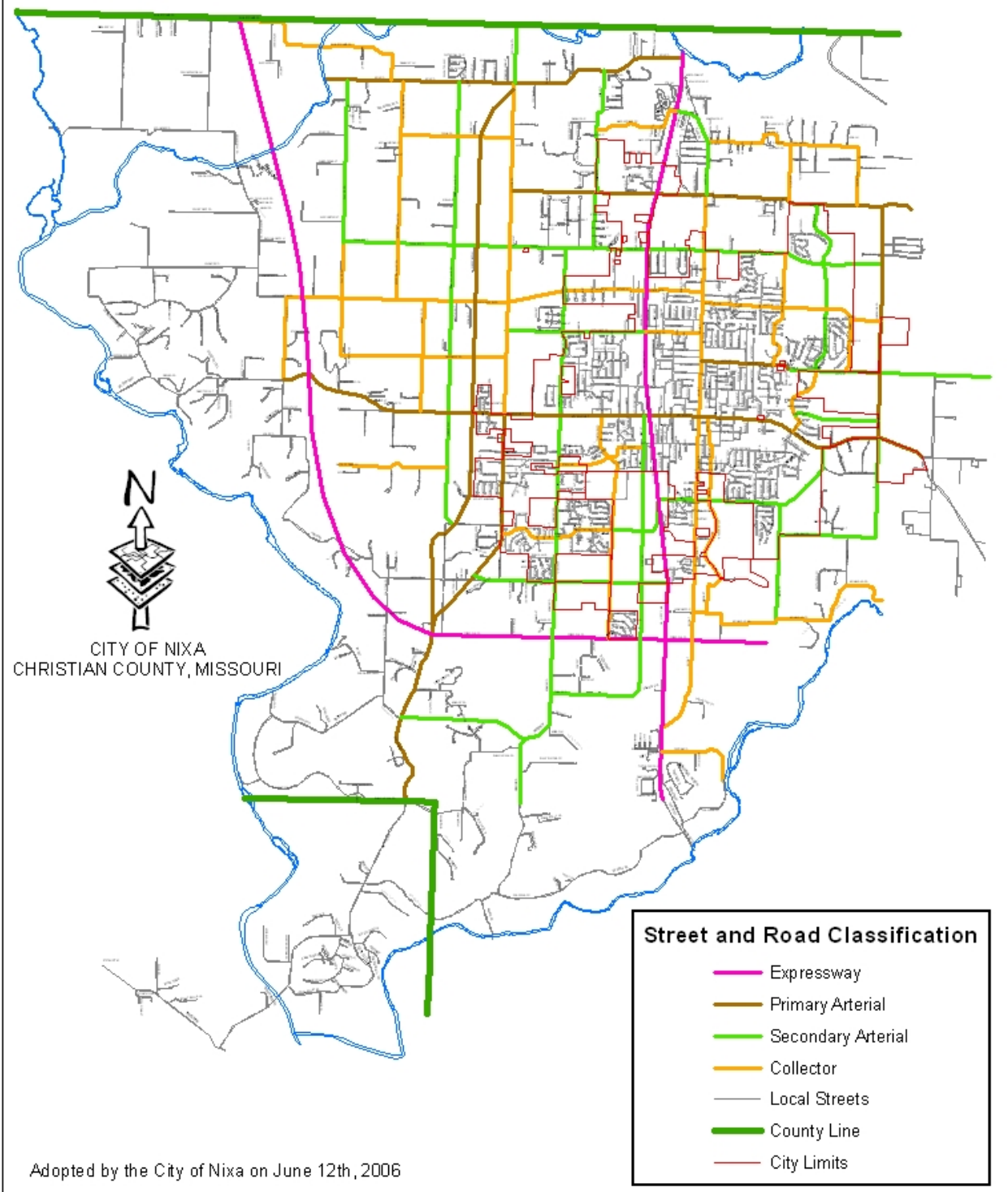
The following strategic issues were developed by the Transportation focus group and were prioritized by the Board of Aldermen and the Planning and Zoning Commission, where a score of “1” was the highest priority and “9” was the lowest priority:

Issue	Score
1 Public safety	23
2 Funding the maintenance and improvement of streets	25
3 Planning the future local and regional thoroughfare system	37
4 Manage access to arterials and some other streets	42
5 Maintaining working relationships with other govts, individuals, & org.	52
6 Land use versus transportation in terms of development	52
7 Pedestrian mobility	62
8 Serving an aging population	75
9 Examine the possibility of mass transit	82

Circulation

The Traffic Circulation Plan provides a framework for decision-making on transportation system improvements. While many of the policy statements contained in the circulation plan address long-range transportation needs, the plan also sets standards applicable in day-to-day decision-making on development proposals and capital investments. The policies and standards of the Traffic Circulation Plan are intended to achieve the goal of safe and efficient movement of vehicular and pedestrian traffic throughout the City of Nixa and the Nixa Planning

Traffic Circulation Map



Area.

Goal #3: Create and maintain a transportation system that promotes and supports all existing and planned land uses while providing an adequate, safe and efficient transportation system that is compatible with the natural terrain and economic development.

Objective #3.A (Issues 1, 3, 6)

Enforce the street functional classification system for existing and future development.

Activity #3.A.i

Development approval is contingent upon the developer providing on-site and off-site improvements, when warranted, to provide sufficient street capacity to handle the additional traffic.

Activity #3.A.ii

Development should be permitted only if planned system improvements will be completed within a reasonable period of time or the developer agrees to install the needed improvements.

Street Classification

The street classification system serves as an integral determinant of land use development patterns within the City. Streets are classified according to their intended function of providing for traffic movement and/or access to abutting properties. Enforcing the street classification system is vital to maintaining continuity and efficiency in the circulation system. The function classification of streets is noted as follows:

1. Expressway: Partial access control and high priority for traffic flow with at-grade signalized intersections for major streets. Intended for high-volume, moderate-to-high speed traffic movement across the metropolitan area with minimal access to adjacent land. May be designed as a highway with separation for adjacent land uses or as a street with controlled access to adjacent land uses. Service access should be provided from lower order streets.

2. Primary Arterial: Provides for high-to-moderate volume, moderate-speed traffic movement between through major activity centers. Access to abutting property is subordinate to traffic flow and is subject to necessary control of entrances and exits.
3. Secondary Arterial: Augments and feeds the primary arterial system and is intended for moderate-volume, moderate-speed traffic movement. Access to abutting property is partially controlled.
4. Collector: Collects and distributes traffic between arterial streets and local streets. Intended for short length trips while also providing access to abutting properties. Design of collector streets varies depending on the character and intensity of traffic generated by adjacent land development.
5. Local: Provides direct access to abutting property. Intended for low-speed, low-volume traffic movement and for short length trips. Design of local streets varies depending on the character and intensity of traffic generated by adjacent land development.

Objective #3.B (Issues 1, 2, 3, 6)

Continue to give high priority to the upgrading of substandard primary and secondary arterial(s) and collector streets and continue to plan for new major streets in the City and the City's planning area.

Activity #3.B.i

Maintain current City of Nixa street system through the City's annual Capital Improvement Program (CIP).

Traffic System Management

Existing streets not constructed to acceptable standards for their intended function will continue to pose safety, operational and maintenance problems. Improvements needed for major streets should be incorporated into a five-year Capital Improvement Program on an on-going basis. In those cases where substandard "major streets" (primary arterials, secondary arterials and collectors) are not likely to be improved during the course of development of adjoining property, improvements should be programmed at public cost or through special assessment.

Extensions of existing streets or construction of new streets should be prioritized on the basis of the need for servicing growth areas and for relieving traffic congestion on other streets. A priority system for upgrading substandard major streets should be developed, with priority assigned on the basis of the following factors:

1. Existing and projected traffic volumes;
2. Volume to capacity ratios;
3. Incidence of accidents;
4. Structural conditions;
5. Surface width;
6. Travel speeds; and
7. Sensitivity to surrounding neighborhoods.

The rapid pace of growth in Nixa requires the continued planning and reservation of adequate rights-of-way for upgrading the existing major street network as well as construction of new arterials and collectors.

Objective #3.C (Issues 1, 3, 4, 5, 6)

Maintain a traffic system that encourages the use of arterial streets for cross-town and regional trips, collector streets for movement of vehicular trips from neighborhoods to arterial streets and discourage the use of local streets to accommodate through traffic.

Activity #3.C.i

Provide adequate roadways to discourage diversion of cross-town and through traffic onto neighborhood collector and local streets.

Activity #3.C.ii

Work with local neighborhood groups to reduce traffic on neighborhood streets.

Activity #3.C.iii

Work with the Missouri Department of Transportation (MoDOT) to enhance the maintenance, improvement, signalization and traffic flow of US 160 and Hwy 14.

Activity #3.C.iv

Maximize the efficiency of arterial streets through access management, providing input to MoDOT concerning the number, spacing and timing of signalized intersections without hindering economic development.

Objective #3.D (Issues 1, 3, 4, 6)

Regularly assess and revise the City's Circulation Plan map and incorporate accurate technical specifications for each street classification's design and construction standards.

Objective #3.E (Issues 1, 3, 4, 6)

Preserve major street alignments by preventing development within corridors designated as rights-of-way for existing and future streets.

Activity #3.E.i

State law permits cities to adopt an official map of proposed street alignments and prohibit the issuance of building permits within the mapped right-of-way. Develop a map that will be based on the recommendations of the Traffic Circulation Plan that is sufficiently detailed to denote the limits of all rights-of-way for Primary Arterials, Secondary Arterials and Collector streets.

Objective #3.F (Issues 1, 3, 6)

Proposed development should bear a reasonable relationship to the street classification system and capacity level.

Activity #3.F.i

Require that a basic traffic analysis be submitted to all rezoning proposals, including but not limited to: projection of the number of vehicle trips generated by the proposed land use and the impact of these trips on the adjacent street system.

Objective #3.G (Issues 1, 2, 3, 5, 6)

Work with developers to assure that the City's transportation planning efforts are realized during actual development.

Activity #3.G.i

Developers and/or property owners will dedicate all necessary right-of-way in conformance with the City's right-of-way specifications.

Activity #3.G.ii

Discourage the construction of dead-end streets.

Activity #3.G.iii

Encourage the construction of sidewalks along all of the City's arterial and collector street system.

Objective #3.H (Issues 1, 3, 4, 5, 6, 7)

Balance land uses and the transportation system to maintain and improve current levels of mobility.

Activity #3.H.i

Coordinate transportation and land use improvements on a short-term and long-term basis.

Activity #3.H.ii

Monitor residential development and percentage of build-out to measure the accuracy of planned land use versus developed land use.

Activity #3.H.iii

Plan and design the transportation system to support and enhance current levels of Nixa citizens' quality of life.

Objective #3.J (Issues 6, 7, 9)

Examine and analyze options for local and regional modes of transportation other than vehicles.

Activity #3.J.i

Explore and develop alternatives for upgrading sidewalks or for creating new sidewalks where there is current pedestrian movement.

Activity #3.J.ii

Pursue transportation alternatives for Nixa's senior citizens, including partnerships with other government or private organizations.

Activity #3.J.iii

Work closely with the Springfield Metropolitan Planning Organization (MPO) concerning the expansion of transportation opportunities available to senior citizens and the disabled population, including planning, public education and implementation.