City of North Little Rock

Master Street Plan

Adopted by
Ordinance 8601
January 13, 2014
Amended: Ordinance 8727
April 20, 2015

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Appendix: **Master Street Plan Map**
Bicycle Plan Map

ORDINANCE NO. 8601

AN ORDINANCE ADOPTING A NEW MASTER STREET PLAN AND MAPS FOR THE CITY OF NORTH LITTLE ROCK; REPLACING THE PREVIOUS MASTER STREET PLAN; DECLARING AN EMERGENCY; AND FOR OTHER PURPOSES.

WHEREAS, the North Little Rock Planning Commission approved (8 affirmative votes; 1 absent) a plan titled "City of North Little Rock Master Street Plan," along with attached maps, for the City and its planning area at a regularly scheduled meeting thereof on October 8, 2013 after conducting three public hearings on August 13, 2013, September 10, 2013 and October 8, 2013; and

WHEREAS, it is in the best interests of the citizens and residents of the City of North Little Rock that the above-referenced City of North Little Rock Master Street Plan and maps be adopted by the City Council.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF NORTH LITTLE ROCK, ARKANSAS:

SECTION 1: That the City of North Little Rock Master Street Plan, along with maps, a copy of which is attached hereto as Exhibit "A", is hereby adopted and approved.

SECTION 2: That all ordinances or parts of ordinances in conflict herewith are hereby repealed to the extent of the conflict.

SECTION 3: That the provisions of this Ordinance are hereby declared to be severable and if any section, phrase or provision shall be declared or held invalid, such invalidity shall not affect the remainder of the sections, phrases or provisions.

SECTION 4: It is hereby found and determined that the adoption of the City of North Little Rock Master Street Plan as provided for herein is immediately necessary in order to insure the proper and orderly growth of this land and the proper and orderly growth of the City of North Little Rock, Arkansas, and being necessary for the immediate preservation of the public health, safety and welfare; THEREFORE, an emergency is hereby declared to exist, and this Ordinance shall be in full force and effect from and after its passage and approval.

Amendments

1. Ordinance 8616 March 10, 2014	Remove proposed Collector from MacArthur Dr. to Donovan Briley Blvd
2. Ordinance 8670 August 25, 2014	Shift Paul Ells Dr. and Vestal Ext; Alter Counts Massie Rd pavement width
3. Ordinance 8706 January 26, 2015	Remove proposed extension of Country Club Parkway
4. Ordinance 8727 April 20, 2015	Realign Collector Street Northshore Lane

ARTICLE 1. THE PURPOSE OF THE MASTER STREET PLAN

The Master Street Plan is the plan to support the mobility needs of the community. This plan is the official document to promote orderly growth and development and to accommodate of all modes of travel. The City is required to adopt a Master Street Plan so that development requirements are clearly defined and implemented through the Control of Development and Subdivision of Land Regulations. The document defines the policies of the City with regard to the future location, function, and design of our streets and may include other elements such as how transit or bicycle routes are proposed and how those interface with proposed local streets.

The Planning Area Boundary for the Master Street Plan includes both the City Limits and the territorial jurisdiction, the defined two mile boundary beyond the City Limits where the City prepares plans, ordinances, and regulations.

The Control of Development and Subdivision of Land Regulations is a companion document to the Master Street Plan. If a discrepancy is found between the Master Street Plan and the Control of Development and Subdivision Regulations, the provisions of the Control of Development and Subdivision Regulations shall take precedence.

Streets and highways serve three basic functions - providing passageways for the movement of people and goods, providing access to property, and providing land for public utilities. The dependence on motor vehicles to sustain our local economy and to accommodate most travel has increased the importance of the Master Street Plan. The City's Planning Commission has a goal of reviewing and revising the Master Street Plan periodically so that the Plan remains current and in keeping with ever changing urban landscape.

The transportation system, both existing and planned, strongly influences land use patterns and urban activities. Conversely, the type and intensity of land development affect the operational efficiency of the transportation elements. The intensity of land use directly impacts traffic which impacts the level of service of a street. Land development and street improvement decisions by the public and private sectors are interrelated. For this reason, decisions that affect land use and the system of streets should be guided by a general plan for the City. The goals and objectives of the general plan should be realized through provisions of the Master Street Plan, the Zoning Ordinance, and the Control of Development and Subdivision of Land Regulations.

The level of access from our streets to adjoining land is guided by an adopted functional classification system that defines the intended purpose of the roadway. Urban freeways are designed to provide a high level of traffic capacity at fast travel speeds with little or no access to abutting property and a ban on bicycling and pedestrian activity. Local collector streets, on the other hand, are designed primarily to provide access to property with less emphasis on travel capacity or travel speed. The Master Street Plan presents a recommended hierarchy of streets and highways by functional classification to guide the design of the route and the amount of access afforded to abutting property.

Planning for streets and roadways takes place at both state and local government levels. At the State level, the Arkansas State Highway and Transportation Department (AHTD) is responsible for the planning of the State system. This system is an important segment of travel network and

provides for the backbone for local commuter traffic, especially between communities. The AHTD is also authorized to study and prepare plans relating to the streets and highways network of the urban area. The Metropolitan Planning Organization, Metroplan, is the local Council of Local Governments and the center where regional transportation decisions are resolved.

Arkansas cities and counties have the responsibility and authority to develop and maintain a system of streets and roads. Both have legislation authorizing them to undertake planning in general and to prepare plans specifically pertaining to their streets and roads.

Implementation of Master Street Plans is accomplished at both the state and local government levels. At the local level, the City of North Little Rock has the authority to establish building setback lines parallel with street rights-of-way and also the control of entry onto streets and roadways. The City of North Little Rock acquires right-of-way through dedication, purchase, gift, or condemnation. The City is permitted by Arkansas statutes to plan and to implement those plans two miles beyond its corporate limits. The City reviews proposed development or subdivision plats and these often create new streets. While the City has the authority to approve the platting of streets in unincorporated areas and may authorize them to be filed for record, Pulaski County must accept street improvements prior to accepting future maintenance responsibilities.

The Master Street Plan of North Little Rock, Arkansas is composed both text materials and maps entitled and combined these are the Master Street Plan for North Little Rock, Arkansas.

ARTICLE 2. RESPONSIBILITIES AND AUTHORITY

2.1 Power to Adopt and Enforce Plans. In accord with Act 186 of 1957, as amended and codified in the Arkansas Code, Annotated (A.C.A) in § 14-56-401, et seq: "Cities of the first and second class in incorporated towns shall have the power to adopt and enforce a plan or plans for the coordinated, adjusted and harmonious development of the municipality and its environs."

2.2 The Planning Commission. The North Little Rock City Council has created a planning commission with appointment and terms of members provided by city ordinance. The Planning Commission has selected its officers, established its meeting dates, adopted rules and regulations and by-laws for the discharge of its duties and the transaction of business, all according to A.C.A.§ 14-56-408. As specified in A.C.A §: "The general purpose of the Planning Commission is to prepare or have prepared a plan or plans of the municipality, to receive and make recommendations on public and private proposals for development, to prepare and administer planning regulations, to prepare and transmit to the legislative body recommended ordinances implementing plans, and to advise and counsel the city government and other public bodies. . . "

2.3 Master Street Plan. As specified in A.C.A § 14-56-414(d)(1): "The Planning Commission may prepare and adopt a master street plan which shall designate the general location, characteristics, and functions of streets and highways. The Plan shall include the general locations of streets and highways to be reserved for future public acquisition; it may provide for the removal, relocation, widening, narrowing, vacating, abandonment, and change of use or extension of any public ways."

2.4 General Objectives of the Master Street Plan. The following are the general objectives of the North Little Rock Master Street Plan:

a. To provide for the efficient and safe transportation of all people and goods,
b. To minimize the effect of traffic on residential areas,
c. To minimize the effect of traffic on residential areas,
d. To provide smooth transition of traffic from residential areas to arterials, expressways and freeways,
e. To provide adequate access to all parcels of land in a manner that will suit needs and intended uses, and
f. To recognize and fulfill the different transportation needs of properties of different land uses.

2.5 Implementation of Plan. As specified in A.C.A. § 14-56-417: “Following adoption filing of the Master Street Plan, the Planning Commission may transmit to the City Council, such ordinances and regulations as are deemed necessary to carry out or protect the intent of the Master Street Plan or parts thereof.”

2.6 Scope of the Plan. The Plan seeks to meet specific planning objectives set forth below:

a. To functionally classify the street network both within the city and within the territorial planning boundary in accordance with the nomenclature and standards as established and enacted by the General Assembly of the State of Arkansas, Act 3008 of 1973,

b. To coordinate the plan with the Metropolitan Transportation Plan in accordance with the existing agreement of understanding,
c. To indicate on the plan map the corridors for proposed new streets and access ways,
d. To designate standards and criteria to guide incremental improvement with new development,
e. To identify needs to improve planning and programming,
f. To accommodate alternative modes of travel on public rights-of-ways, and
g. To advocate measures to manage existing facilities to reduce accidents, property damage, and to promote a quality community.

ARTICLE 3. FUNCTIONAL CLASSIFICATION

As enacted by the General Assembly of the State of Arkansas Act 308 of 1973 the functional classification is defined as grouping of public ways by likeness of service or purpose into classes or systems according to the character of service they are intended to provide.

Table One
Functional Classification

System	Primary Function
Interstate Freeway	Provide basic interstate service. Link major cities.
Other Freeways & Expressways	Provide high level of interstate and intrastate service. Connect major generators of traffic and service between and through communities.
Other Principal Arterials Streets	Provide a system for the major traffic generators within the community.
Minor Arterial Streets	Provide connections to and through neighborhoods and within the urban region.
Collector Streets	Serve the economy and regional destinations not served by a higher system. Collect and distribute traffic to and from arterial streets. Provide service to neighborhoods, recreational areas, and commercial and industrial districts.
Local Streets	Serve direct access to property within the City.

ARTICLE 4. CROSS SECTIONS AND STREETSCAPE STANDARDS

State, regional, and local policies call for the inclusion of the following definitions and standards. These standards are often required when federal funding assistance is to be requested for the modification of the roadway facility.

4.1 Freeways and Expressways. Right-of-way must be adequate to accommodate 6 main lanes; a generalized right-of-way width of 300 ft. may be used for planning purposes and may vary depending on terrain, with the minimum right-of-way width of 200 ft. The maximum lane width is 12 ft. A non-traversable median (e.g. raised, depressed, concrete barrier) is required. Inside shoulders must be a minimum of 6 ft. wide on a 4-lane section and 10 ft. wide for a standard 6-lane cross-section. Outside shoulders will be a minimum of 10 ft. for either section. Landscaping of medians and buffers is encouraged. Sidewalks not required on freeways and expressways.

4.2 Principal Arterials. The minimum recommended right-of-way width is 100 ft. right-of-way (ROW) must accommodate 4 main lanes and allow for a maximum of 6 lanes or three in each direction. Curb and gutters are the norm in the urban setting but open shoulders may be used with low impact designs or more rural areas. Pedestrian accommodation, sidewalks are required on both sides of traffic lanes buffering, and safe pedestrian crossings. The local standard is to provide a sidewalk width of 5 ft. and designed according to the American Disabilities Act (ADA). A minimum 4 ft. buffer is required between the back of curb and the sidewalk with the preferred buffer width being 5 ft. However, no buffers are required in the downtown area where the typical buffer strip is commonly paved. Safe pedestrian crossing provisions, like pedestrian refuge islands or signalized crosswalks, are required where the pedestrian crossing is more than 50 ft. of pavement width. If on a planned bikeway route, the bicycle element must be included and must adhere to the bicycle design standards as specified herein. Bike lanes should be the outermost moving lane and 5 ft. in width where raised curbs exist.

Lane width is 11 ft. minimum for travel lanes or 12 ft. with posted speeds over 35 MPH or when truck traffic mix warrants. It is recommended that a median be included with new 4-6 lane principal arterials. Continuous center turning lanes may be allowed only in areas of preexisting intensive, strip commercial development. Optional elements may include 8 ft. minimum paved shoulders where terrain and/or forecast land use densities are compatible with an open shoulder design typically used in rural areas. Landscaping of medians and buffers is encouraged. A non-traversable median is preferred (i.e. raised or depressed) for major retrofits and on new construction. On street parking is typically discouraged on principal arterials as the facility typically accommodates a high level of traffic service. The exception is in densely developed urban areas, such as through the downtown or neighborhood centers.

4.3 Minor Arterials. The minimum right-of-way width is 60 ft. Right-of-way must accommodate 4 main lanes. There is a maximum of 2 through lanes in each direction. Curb and gutter is required except in cases where terrain and/or forecast land use densities are compatible with an open shoulder design typically used in rural areas. Pedestrian friendly design is required, including sidewalks, buffering, and safe pedestrian crossings. Sidewalks are required on both sides of the roadway. Minimum sidewalk width is 5 ft. and must be compatible with the American Disabilities Act. A buffer is required between the back of curb and the sidewalk that is a minimum of 4 ft. with the preferred width being 5 ft. However, no buffers are required in the

downtown area where the typical buffer strip is commonly paved. Safe pedestrian crossing provisions are required where more than 50 ft. of pavement (including the gutter) has to be crossed by a pedestrian where a crossing is anticipated based on land use. If on a planned bikeway route, the bicycle element must be included and must adhere to the bicycle design standards as specified herein. Bike lanes should be the outermost moving lane and 5ft. in width where raised curbs exist.

Lane width is 11 ft. minimum for main travel lanes or 12 ft. maximum where the design speed and truck traffic mix warrants. A median or pedestrian refuge area is recommended where the pavement width is greater than 50 ft. wide. It is recommended that a median be included with new 4-6 lane principal arterials. Continuous center turning lanes may be allowed only in areas of preexisting intensive, strip commercial development.

Optional Elements may include 8 ft. minimum paved shoulders where terrain and/or forecast land use densities are compatible with an open shoulder design typically used in rural areas. Landscaping of medians and buffers is encouraged. A non-traversable median is preferred (i.e. raised or depressed) for major retrofits and on new locations. On street parking is allowed as 8 ft. minimum (including the gutter) parallel parking on one or both sides.

4.4 Collector Roadways. The minimum right-of-way width is 60 ft., 70 ft. in industrial areas or with open shoulders. Curb and gutter are required except in cases where terrain and/or forecast land use densities are compatible with an open shoulder design typically used in rural areas. Pedestrian friendly design is required, including sidewalks, buffering, and safe pedestrian crossings. Sidewalks are required on both sides of the roadway. Minimum sidewalk width is 5 ft. and must be compatible with the American Disabilities Act. A buffer is required between the back of curb and the sidewalk that is a minimum of 4 ft. with the preferred width being 5 ft. However, no buffers are required in the downtown area where the typical buffer strip is commonly paved. Safe pedestrian crossing provisions are required where more than 50 ft. of pavement (including the gutter) has to be crossed by a pedestrian where a crossing is anticipated based on land use. If on a planned bikeway route, the bicycle element must be included and must adhere to the bicycle design standards as specified herein. Bike lanes should be the outermost moving lane and 5’ in width where raised curbs exist.

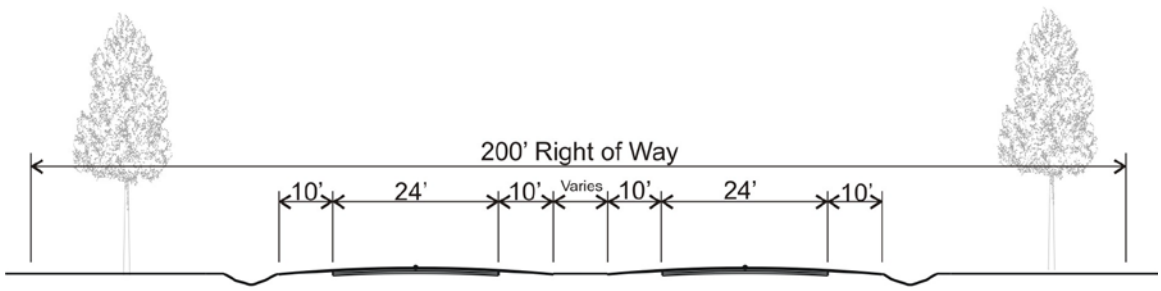
Lane width is 10 ft. minimum for main travel lanes or up to 12 ft. maximum where the design speed and truck traffic mix warrants. There is a maximum of 2 through lanes in each direction.

Optional Elements may include 6 ft. minimum paved shoulders where terrain and/or forecast land use densities are compatible with an open shoulder design typically used in rural areas. Landscaping of medians and buffers is encouraged. A non-traversable median is preferred (i.e. raised or depressed) for major retrofits and on new locations. On street parking is allowed as 8 ft. minimum (including the gutter) parallel parking on one or both sides.

4.5 Roadway Cross-Sections. The following sections outline the recommended, typical roadway cross-section standards.

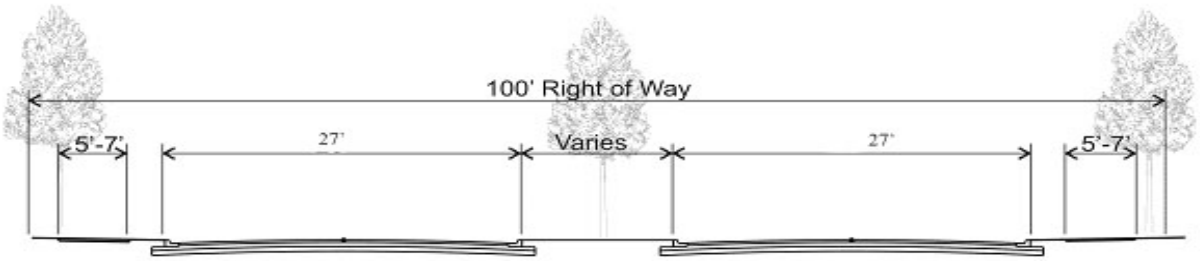
4.5.1 Freeways and Expressways provide high-speed travel through the urban area. Freeways maintain this high service by limiting access to adjacent land. Access is provided by freeway interchange ramps which transitions movements between two roadways. Access on expressways is

partially controlled and may include signalized intersections and turn-around median breaks. On these higher type roadways a minimum 200' right-of-way is recommended. The carrying capacity of a freeway lane is about 1800 vehicles per hour (VPH). This figure is reduced as additional access is allowed.



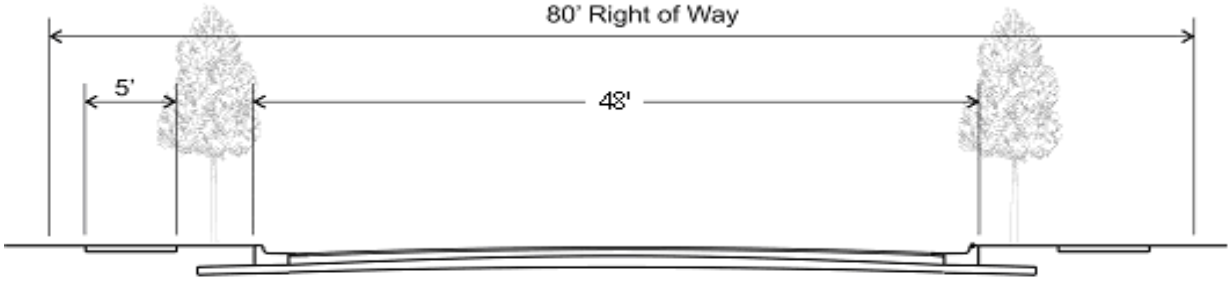
FREEWAYS AND EXPRESSWAYS

4.5.2 Principal arterials provide both long distance connections through the urban area and to major traffic generators within the community. Roadways are designated principal arterials to imply the need to focus more on moving traffic rather than providing direct access to adjacent land. Traffic management techniques used to maintain a high level of traffic capacity on these roadways include the use of medians, restricting curb-cuts to some spacing policy and limiting the use of traffic signals to the intersection with other significant roadways. Principal arterials have a 100 ft. minimum right-of-way.

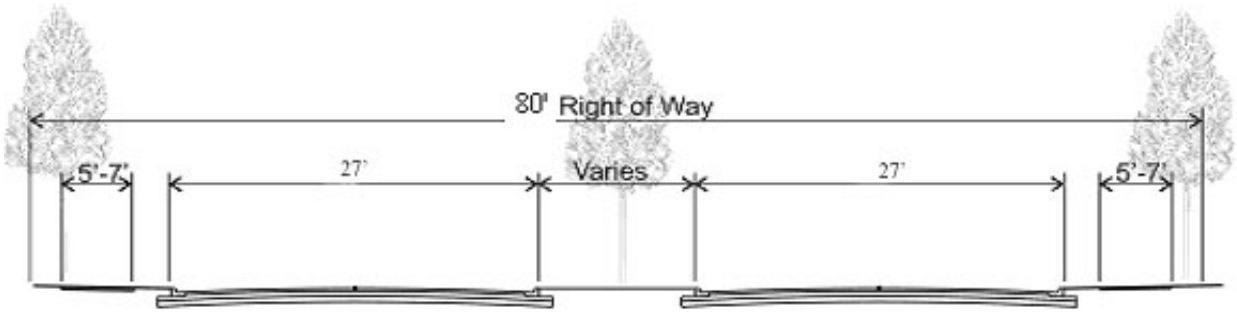


PRINCIPAL ARTERIAL

4.5.3 Minor arterials provide network connections within and through the urban area while providing extensive access to adjoining properties. There are numerous cross-section configurations depending on possible features including: on-street parking, bicycle lanes, medians or center-turning lanes. Minor arterials have a minimum 60 ft. right-of-way.

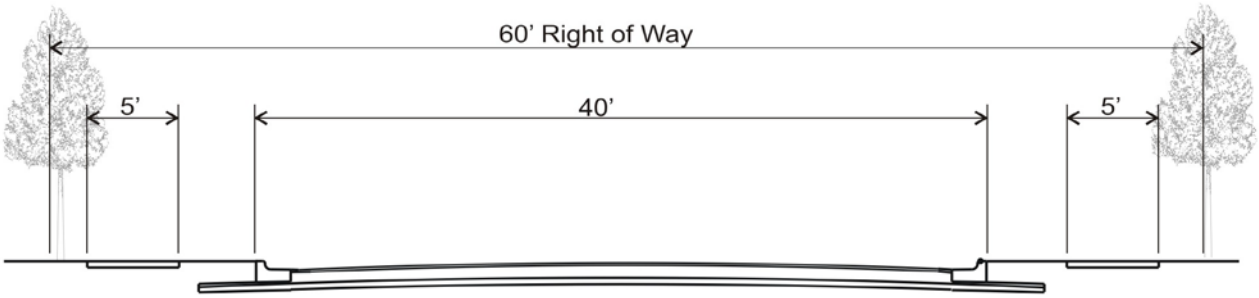


Typical 4 Lane
MINOR ARTERIAL

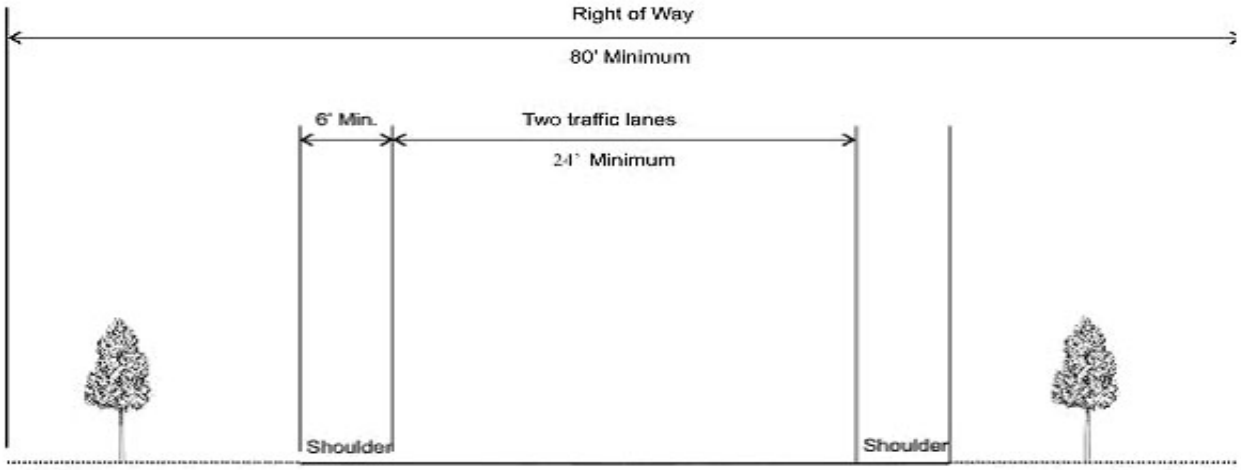


Minor Arterial

4.5.4 Collector roadways are recognized roadways that provide neighborhood or system connections. These roadways provide extensive access to property. The design standards for these roadways are slightly higher than local streets. In some cases, collectors may be identical in design to local streets but are of extensive length, providing commuter route connections. In general, collectors will have higher traffic counts than local streets. In relatively flat areas, an open ditch design may be the preferred design with shoulders and side swale ditches. This design has been found very effective to avoid water undermining the roadway pavement as is often the case when curbs are constructed in very flat, slow draining areas. These open ditch designs also are preferred with heavy truck traffic as a wider roadway helps maneuverability or in relatively rural areas where the outside lanes serves as a bicycle, shared lane facility. Collectors have a minimum 60 ft. right-of-way.

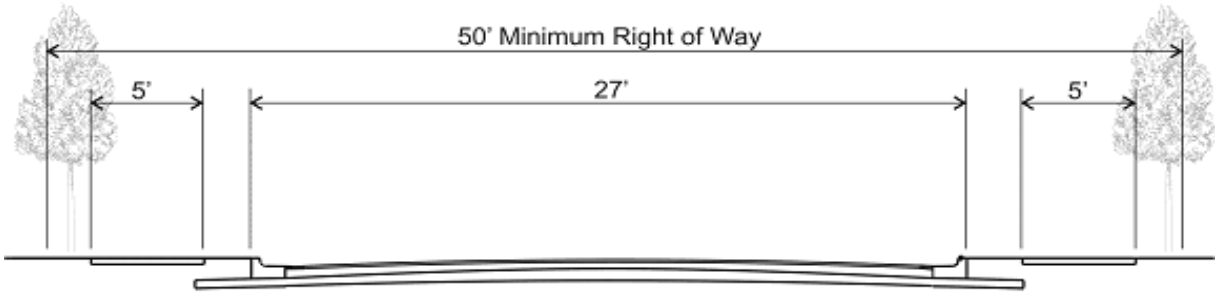


COLLECTOR STREETS

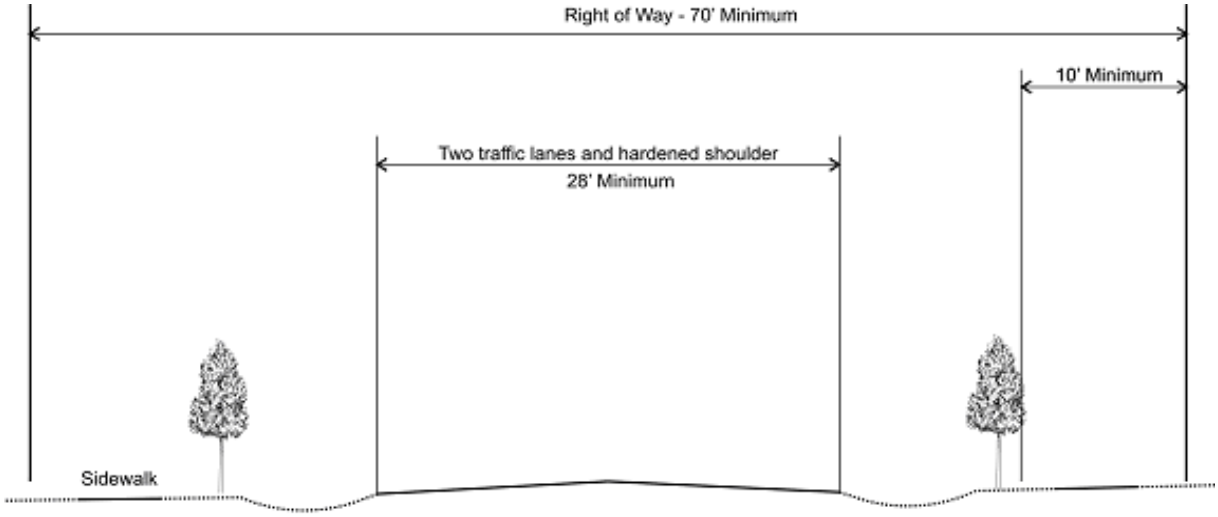


Rural Collector Street

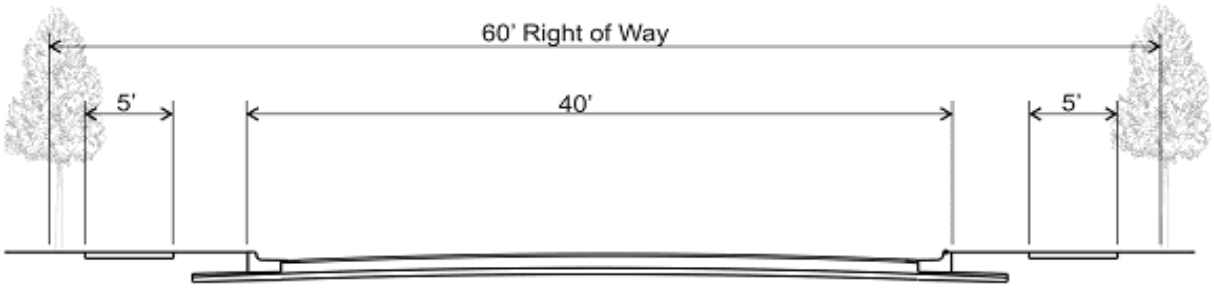
4.5.5 Local streets serve to provide access to property and all lots must have access to a public or private street. These roadways provide the shortest routes with the lowest traffic volumes. Low traffic volumes and slow travel speeds help create a good residential setting. The Planning Commission reviews new development in part to avoid creating "cut-through" streets that become commuter routes and generally lower quality of life for residents. Local streets need not be wide as commuter routes. Some measures to slow traffic in neighborhoods, other than the lay-out of streets, include allowing on-street parking, and adding traffic calming devices such as speed humps or landscaped islands centered in street intersections. The minimum right-of-way width is 50 ft.



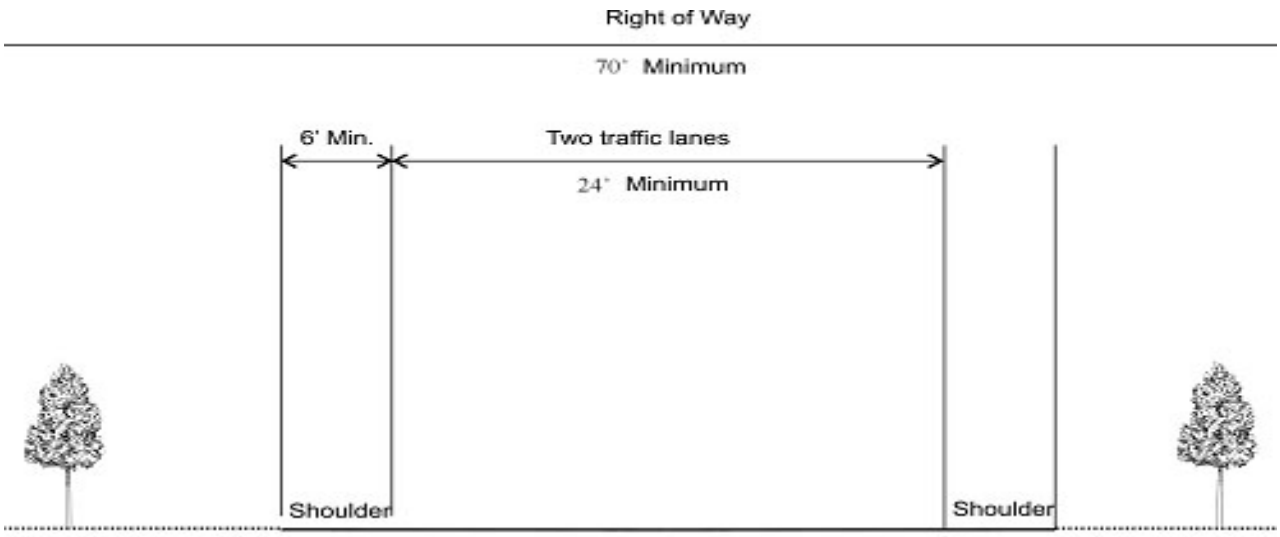
Residential Urban Design



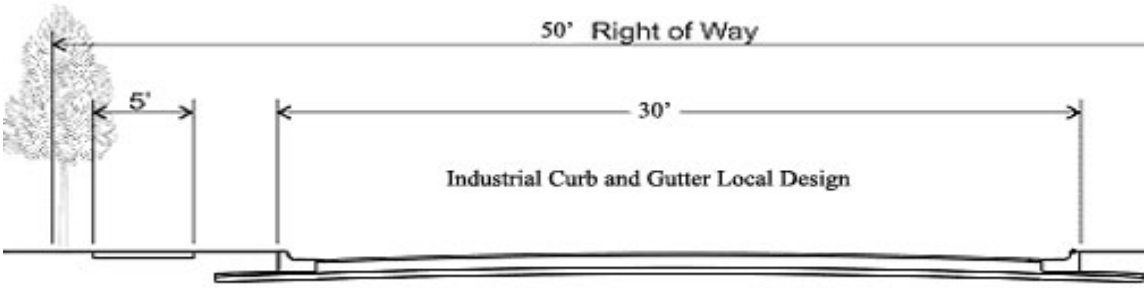
Residential Estate Design



Commercial



Industrial/Commercial Open Shoulder



Industrial Curb and Gutter

4.6 Streetscape Standards. Street trees are required along all streets. The recommended types of street trees to be used as well as the spacing requirements are listed in the City's Screening and Landscaping Ordinance, found as Article 15, of the North Little Rock Zoning Ordinance. The foliage of these trees is to be maintained with a 7 ft. clearance from the ground with additional clearance provided near traffic control devices and 13 ft. clearance above travel lanes.

ARTICLE 5. CIVIL ENGINEERING DESIGN AND CONSTRUCTION STANDARDS

5.1 Basis of Design. The existing and proposed streets in North Little Rock and the unincorporated planning area are classified by function. The functional classification, Principal Arterial through Local Street, designates the standard thickness and treatment in the various layers of the "pavement structure". The pavement structure is a combination of the sub-base, base course, and surface course placed on a sub grade, generally the natural soil, to support the traffic load and distribute it to the roadbed. The pavement structure may utilize a "flexible pavement", asphalt-type materials, or a "rigid pavement", concrete.

A second element of engineering design is the controlling wheel load. The wheel load expressed in pounds relates to the functional classification of streets and the service of streets to specified uses of land as shown in the following table:

Table Two
Wheel Load by Street Standards

Classification of Streets	Controlling Wheel Load*
Principal Arterial	10,000 lbs.
Minor Arterial	8,000 lbs.
Collector	6,000 lbs.
Local	4,000 lbs.

* Service provided by streets of any of the above classifications that are designated truck routes, that serve freight terminals, warehouses, and distribution centers shall have a pavement structure design based on the 10,000 lbs. Controlling wheel load.

Street classification of Interstate Freeway or Other Freeways & Expressways shall be considered as special design situations and may have a substantially different basis of design than that which is outlined herein.

A third element of the basis of design is the variability of soils encountered along a street or roadway and how the soils may relate to the choice of either rigid or flexible pavements.

5.2 Pavement Structure Requirements for Rigid Pavements. Thickness of all rigid concrete pavements, Principal Arterials through Local Streets, may be determined from soil tests run by a reputable testing laboratory. The tests shall include characteristics for identifying Public Roads Administration (P.R.A.) soil groups and sub-grade modulus "K" in pounds per square inch as determined by a reputable testing laboratory. When such sub grade modulus tests are not available, the developer's engineer shall be permitted to select a sub grade modulus from a diagram showing the correlation between P.R.A. classification and the sub grade modulus. Soils having a sub grade modulus of 100 as determined above, and a concrete mixture resulting in a minimum 3,000 pounds per square inch compressive strength in 28 days, and a minimum working stress of 275 pounds per square inch, is the basis upon which the following standards are established:

Table Three
Rigid Pavement Thickness Standards

Classification of Streets	Balance Design with Integral Curb and Gutter	Uniform Thickness (Inches) Based on Controlling Wheel Load Plus Impact
Principal Arterial	8	9
Minor Arterial	7	8
Collector	6	7
Local	5	6

Balanced designs shall be permitted.

No soil test shall be required except if in the opinion of the City's Engineer the sub grade modulus is less than 100. Should the sub grade modulus be less than 100, and the working stress of the concrete be greater or less than 275 pounds per square inch, the above standards shall not govern, and the total pavement thickness shall be determined by computations based on the test results. Should the sub grade modulus be greater than 100 and the working stress of the concrete be greater or less than 275 pounds per square inch, the above standards shall be modified as determined by computations based on the Test results, but in no case shall the total thickness of concrete be less than 5 inches.

5.3 Pavement Structure Thickness Requirements for Flexible Pavements. Thickness for all flexible pavements, Principal Arterials through Local Streets, may be determined by soil tests run by a reputable testing laboratory. The tests shall include characteristics for identifying P.R.A. soil groups and the Hveem Stabilometer Resistance Value of the sub grade materials as determined by a reputable testing laboratory. When such Hveem Stabilometer tests are not available, the engineer shall be permitted to select resistance value from a diagram showing the correlation between P.R.A. soil groups and the Hveem Stabilometer Resistance Value. Soils having an approximate Hveem Stabilometer Resistance Value of 20 as determined above is the basis on which the following standards are established. The Standard Pavement as outlined in these specifications shall be defined as asphaltic Concrete Hot Mix Wearing Surface placed on a Compacted Crushed Stone Base Course. All types of flexible pavements including soil cement stabilization with asphalt surfacing shall be permitted providing, in the opinion of the City's Engineer, the plans and specifications and construction will define and will result in a pavement of equal or greater stability. The total thickness shall be determined by the methods outlined in the specifications:

Table Four
Flexible Pavement Thickness Standards

Classification of Streets	Recommended Traffic Index	Total Thickness (Inches) of Standard Flexible Pavement
Principal Arterial	7	16
Minor Arterial	6	13
Collector	5	11
Local	4	9

No soil tests shall be required except if in the opinion of the City's Engineer the Hveem Stabilometer Resistance Values be less than 20. Should the Hveem Stabilometer Resistance Values be less than 20, the above standards shall not govern, and the total pavement thickness shall be determined based on the test results. Should the Hveem Stabilometer Resistance Value be greater than 20, the above standards shall be modified as determined by the test results, but in no case shall the total thickness of the standard flexible pavements be less than 8 inches.

5.4 General Requirements for Storm Sewers and Drainage Facilities. The capacity of all storm sewers and drainage facilities shall be determined by using a rational approach for drainage areas 200 acres or less. Soil conservation service method T-55 should be used on areas over 200 acres, giving due consideration to rainfall intensity, soil characteristics, proper run-off coefficients based on ultimate development as shown on the current City of North Little Rock Lane Use Plan, slope, and the hydraulic properties of the pipes and drainage facilities used.

Design rainfall intensity shall be based on 4 inches per hour except in new subdivisions, where the rainfall intensity shall be based on a time of concentration of at least a once in 10 year expectancy as determined from local rainfall records. Major drainage ways for a minimum of 100 acres shall be based on a once in 10 year expectancy with overflow provisions for the once in 10 year conditions determined from local rainfall records. The minimum design velocity shall not be less than 2 1/12 ft. per second. The maximum design velocity should not exceed 6 ft. per second. Stabilization measures such as sodding will be required. Where design velocities exceed 10 ft. per second, roadway ditches shall be stabilized with impervious materials, such as concrete, asphalt, stone or manufactured rip rap. Inlets should be placed at intervals generally not to exceed 600 linear feet, except under special conditions as approved by the City Engineer.

5.5 Construction Quality Control. A registered professional engineer or an independent testing laboratory must certify, to the City Engineer, that at least minimum standards for serviceability-performance of roadway construction have been met. The construction quality control for streets and roads in the City of North Little Rock and its planning area must relate to the roadbed soil, sub-base course, base course, and surface course.

Preparation of the sub grade includes at least grading and compaction of the roadbed soils, and may include other means of providing for optimum support of the pavement structure.

The sub-base course shall require a 95% standard proctor density and the base course shall require a 100% standard proctor density.

Core samples for the determination of density and quantities may be required at the developer's expense. Nuclear testing methods will be allowed for determination of densities. Copies of the test results will be provided to the City Engineer. The developer will repair cuts made in taking samples.

5.6 Geometric Design. The developer shall provide certification by a registered engineer that dimensions are substantially in compliance with the standards for geometric design, and that no slope or gradient exceeds the maximum standards for slope and grade.

Table Five
Summary of Minimum Right-of-way and Design Standards[1]

	Freeway Express	Principal Arterial	Minor Arterial	Rural Collector	Urban Collector	Estate Local	Urban Local
ROW (Min)[2]	200 ft.	100 ft.	60 ft.	70-80 ft.	60 ft.	70 ft.	50 ft.
Paved Width[3]	NA	56 ft.	48 ft.	24 ft.	36 ft.	28-40 ft.	27 ft.
Shoulder Width[4]	NA	NA	8 ft.	6 ft.	NA.	4 ft.	NA
Center Line Grade (Max.)[5]	NA	9 %	9 %	12 %	12 %	15 %	15 %
Sight Distance (Min.)	NA	500 ft.	500 ft.	300 ft.	300 ft.	200 ft.	200 ft.
Radius of Curve (Min.)	NA	600 ft.	600 ft.	300 ft.	300 ft.	100 ft.	100 ft.

See sketches for Detailed Design Requirements.

Notes

1. Arkansas Highway and Transportation Department Standards
2. Principal Arterial-Intersection approaches will require an extra width of 20 ft. extending 250 ft. from the centerline of intersecting arterials and collectors. Minor Arterial-intersection approaches may require an extra width of 10 ft. extending 150 ft. from the centerline of intersecting arterials and collectors.
3. Widths shown are for final stage for Freeway, Principal Arterial, and Minor Arterial. Stage construction is recommended for Freeway, Principal Arterial, and Minor Arterial.
4. Open-ditch sections only. For curb and gutter sections refer to Cross Section Sketches.
5. Centerline grades may be increased an additional two percent for distances not to exceed 200 ft., subject to approval of the Director of Public Works and the Planning Commission, for curb and gutter streets only; however, the average (positive and negative) grade of the entire street alignment shall not exceed the listed requirements.

5.7 Bridges. All bridges and culverts constructed in North Little Rock and Pulaski County within the planning area shall be in accordance with Arkansas Highway and Transportation Department standards, before they will be accepted for dedication to the City or County System.

ARTICLE 6. Reserved

ARTICLE 7. BICYCLE PLAN

7.1 Purpose. The purpose of this document is to focus on accommodation of bicycle travel as a transportation mode. Strategies are ever changing regarding the competition for use of space on the roadway network. To remain current, the City Council has adopted legislation a review and update of the City's Bicycle Plan on an annual basis. A Bicycle Friendly Community Committee has operated for many years to guide this review process. This Committee includes a wide range of individuals involved with bicycling, advocacy groups, city planning, health personnel, and elected officials. This group endorsed the general proposal of developing a citywide system of safe paths, lanes, and suggested routes connecting major parks, schools, community centers, commercial areas and other destinations. The community has a goal of transforming the community to allow cycling to become a valid alternative to the automobile for transportation purposes. The League of American Bicyclists awarded the City a Bicycle Friendly Community designation for advancements and accomplishments. It is hoped that efforts of this plan will provide an outline for continued progress in making the City truly bicycle friendly.

The federal transportation bill, Moving Ahead for Progress in the Twenty-First Century (MAP-21), requires that local governments explore and encourage alternatives to automobile transportation. Transportation by bicycle is an option widely used in other countries and many U.S. cities, but limited locally. Some of the reasons for the lack of cycling for daily transportation include the hilly terrain, the hot and humid climate, the lack of bicycle racks or showers at end destinations, the real and perceived danger of riding in local traffic, and the lack of a separated trails system. The physical barriers restricting use include freeways and rail yards that dissect the community, limited connections in the local street system and the extensive use of cul-de-sacs, all of which prevent convenient connections. But the primary reason more cycling does not occur is the fact that it can be dangerous. Leading causes for this danger include: (1) most streets in the area are too narrow to provide designated bike lanes, (2) automobile speeds are too fast, and (3) the general public is not conditioned to respect the cyclist as a vehicle of the road. Due to these constraints, cycling is likely to be associated more with recreation, exercise, or visits to neighborhood parks than a serious option for commuting. The Bicycle Friendly Community Committee's challenge is to reverse or reduce some of these obstacles.

7.2 Key Terms

<u>Bike lane</u> – A portion of the roadway within the right-of-way designated by striping, signing, and pavement markings for the preferential or exclusive use of bicyclists. Bike lanes are one-way facilities carrying bicycle traffic in the same direction as adjacent motorized vehicular traffic.

<u>Bike path or trail</u> – A path physically separated from motorized vehicular traffic by an open space or barrier within the roadway right-of-way or an independent right-of-way. The adopted minimum standard width of a two-way, shared path is a pavement width of 12 ft. plus one foot of clearance from obstacles (trees and curbs) on each border. A bike trail is a somewhat interchangeable term used for a bike path, the difference being that the term trail is used to describe a path typically in a park setting or in a designated right-of-way corridor specifically for the use of bicyclists and pedestrians. The term trail may also be used to refer to an unpaved or natural surface recreational facility.

Bike route – A designated roadway where pavement is shared with both automobile and bicycle traffic with no special provision for cycling except for signing of the bike route. Typically, bike routes are designated on low volume and relatively low speed streets but often include streets with speeds over 35 MPH. There should be sufficient space on these routes to allow cars to safely pass bicycles by crossing the center line or moving into another traffic lane. Per Arkansas state law, cars must give bicycles at least 3 feet of space when passing. Cars are allowed to cross a double center line to pass a cyclist as long as oncoming traffic allows.

Sharrow - A bicycle logo and two chevrons painted on the street. The purpose of these road markings is to inform both cyclists and motorists of a designated bicycle route and indicate that bicycles have an equal right to the road. Sharrows help alert cars to take caution and share the road with cyclists. Sharrows are allowed on streets with posted speed limits below 40 MPH.

7.3 Key Goals of this Plan

a. Provide relatively safe transportation by bicycle to major parks, schools, community centers, commercial areas and other destinations;
b. Identify cross city connections for work commuting, errands, access to trails, and connecting to other regional routes;
c. Improve bicycle safety education and awareness within the community; and
d. Encourage bicycling as a means of transportation.

7.4 Goal One – Safe Transportation. Provide relatively safe transportation by bicycle to major parks, schools, community centers, commercial areas and other destinations.

The ideal safe bicycle facility would provide paths separated from motorized vehicles and designed properly to accommodate 18 MPH cycling speeds. A good example is the Arkansas River Trail. Still, as the Arkansas River Trail has become a popular destination, the mixing of pedestrians, their pets, skaters, runners, and cyclists has resulted in conflicts. Even with separate facilities, courtesy and user rules are required for a safe and pleasant experience. Informational signs at trail heads have been implemented by the Parks and Recreation Department. These signs contain safety reminders and rules for the area that are important for all users of the trail system.

The focus of this plan is providing a safe setting for cyclists of any comfort and skill level. This means providing bike paths and trails where possible, followed by providing bike lanes. Some cyclists join street traffic and follow normal traffic flow. Other cyclists do not feel comfortable riding in street traffic and will seek to ride where there is a greater feeling of safety.

Safe means of transportation for cyclists must accommodate all levels of experience.

Roadways that have traffic volume, pavement width, and speeds suited for use as a bike path or lane are limited in the city. However, paths, lanes and enhanced roadway shoulders give cyclists a greater sense of protection from motorized vehicles and should be implemented wherever possible. Visual cues such as signs and striped lanes along these systems are important to keep motorists aware of cyclists. All signs shall be retro-reflectorized for use on bike paths, bike lanes, and bike routes.

Routes are easily marked and work well for cyclists who feel comfortable riding in street traffic. Bike route signs and sharrows at regular intervals along designated bike routes remind motorists that the roadway is to be shared with bicycles, as well as identify the route for cyclists.

Design features such as bicycle safe drainage grates, bridge expansion joints, railroad crossings, and smooth pavements also contribute to a safe riding environment for bicyclists.

Sign placement, design, application, and on-street markings shall be in conformance with the Manual on Uniform Traffic Control Devices for Streets and Highways, 2009 Edition published by the U.S. Department of Transportation Federal Highway Administration as well as the Guide for the Development of Bicycle Facilities, 2012 Fourth Edition published by the American Association of State Highway and Transportation Officials.

7.5 Goal Two – Cross City Connections. Identify cross city connections for work commuting, errands, access to trails, and connecting to other regional routes.

Major connections across the city include interconnecting bike paths, lanes, and routes to reach key destinations. The purpose of these connections is to provide a relatively safe way to travel across the city for commuting, errands, recreational use, and transportation outside of the city. While some cyclists may develop their own habitual routes across the city, routes marked with wayfinding would promote and encourage the use of such a system. Cyclists and motorists will become familiar with the routes and awareness will increase. The Bicycle Plan Map identifies where bike paths/trails, lanes, and routes exist and are proposed within the city.

7.5.1 Bike Paths and Trails.

Existing

a. Arkansas River Trail system (a section on River Road, from Rockwater Boulevard to the Big Rock Quarry gate remains an on-street route)
b. Emerald Park Trail along top of Fort Roots (90% complete - one section needs to be widened)
c. Levy Trail from I-40 underpass to 52nd St.
d. Overbrook Trail between JFK and North Hills

Proposed

a. Levy Trail from 52nd St. to Camp Robinson
b. Railroad spur trail along 15th Street west of Pike Ave. to Riverview Park
c. White Oak Bayou trail from Young Road to north of Maumelle Blvd.

7.5.2 Bike Lanes / Enhanced Roadway Shoulders.

Existing

a. Bike lanes on Military Road in Burns Park (between Joe Poch and Funland Dr. (10% complete) - possibly implement enhanced roadway shoulder instead of road widening
b. Tournament Drive in Burns Park
c. Donovan Briley Blvd.

d. Crystal Hill Road to I-40 (50% complete)

Proposed

a. North Hills Blvd./between 15th Street and I-40 (high-priority, needs widening)
b. North Hills - Lakeview to Justin Matthews
c. North Hills - Crestwood to City Limits
d. Paul Eells Drive
e. Counts Massie Road
f. Fairway Ave. - Lakeview to McCain, with sharrows or enhanced roadway shoulder in Lakewood Elementary school zone if bike lane not practical
g. Faulkner Lake Road
h. Walkers Corner Road
i. Crestwood, with sharrows or enhanced roadway shoulder in Crestwood Elementary school zone if bike lane not practical
j. Landski Drive from Parkway to Military Road

7.5.3 Bike Routes.

a. Refer to Bicycle Plan Map

7.5.4 Sharrows.

Existing

a. Harper's Loop

Proposed

a. Randolph Rd. - Crestwood to Kings River Rd. and Kings River Rd. to JFK Blvd.
b. North Hills - On hill from Barbara St. to Lakeview Rd., with Share the Road sign
c. Kierre - JFK to Levy Trail
d. Lakeview Dr.
e. Championship Dr. from Tournament Dr. to Landski Dr.
f. Arlene Laman Dr.
g. Joe K. Poch Dr.

7.5.5 Wayfinding. The following areas of the Bicycle Plan Map were found to need additional wayfinding to inform cyclists of how the route is to continue. Sharrows and/or bike route signs are acceptable wayfinding devices.

a. Locust pointing east on SA Jones to Vine.
b. Route from Locust to Brother Paul Dr.
c. Route from Hwy 165/England Rd. to Hwy 391/Baucum Rd/State Dairy Rd.
d. Additional signage along Colonel Maynard and Hwy 161, plus Walkers Corner Road and Faulkner Lake Road (Harper's Loop).
e. Mark turnoff from Valentine Rd. east onto Maybelline Rd. to reach destinations further north. Otherwise riders will ride under interstate and dead-end.
f. SW corner of Allen & 22nd: bike route sign should point left AND straight, since bike route continues in both directions.
g. 22nd St. on each side of RR X-ing at 22nd and Percy Machin.

h. 16th and Sycamore to indicate it is the way to connect to 13th St to cross RR tracks and reach Main St.
i. Add directional bike route sign at end of Verizon Way – needs to point east, west, and straight for Junction Bridge.
j. Intersection of Kierre and Perin Rd.
k. Texas/Nicole/Valerie (Military-Allen St. connection).
l. N Locust St.
m. Allen St.
n. Parkway Dr.
o. Ridge Rd.
p. W 33rd St/D Ave. (extra signage on curves)
q. Railroad Ave.
r. Joe K Poch Dr.
s. Arlene Laman Dr.
t. Charles H Boyer: need sign for west bound traffic after turning from McArthur, need sign for east bound traffic after turning from Military
u. Covered Bridge to Young Road; unpaved multi-use trail
v. Long-term: place signage and/or sharrows at EACH intersection to indicate direction in which bike route continues

7.5.6 Improved Street Crossings. Safe street crossings are essential to improving the utility of the City's bike routes and paths. The following recommendations were made to improve safety along the Levy Trail-Arkansas River Trail connection. Safe crossings of major roadways can be achieved by means of: signage, signals, raised crosswalks and road markings.

a. Levy Trail Crossing at 33rd Street. Motorists leaving westbound I-40 by access of 33rd Street are slowing down from highway speeds. This proves dangerous for cyclists and pedestrians crossing 33rd Street. The following measures can be taken to alert motorists to the presence of crossing cyclists and pedestrians:
    i. Place crossing with parallel striping, and install motion-activated flashing yellow lights on either side of road at crossing. This will automatically alert motorists to trail users' desire to cross the street.
    ii. Build refuge in the street, at the crossing, and reduce westbound lane to one lane.
    iii. Add stencil-painted roadway markings to alert motorists to upcoming trail crossing.
    iv. Install speed table and/or rumble strips on 33rd St. immediately after off-ramp, before Schaer. This will alert motorists to the need to slow down and use caution. This will also allow time to visualize trail crossing signage and markings.

b. Crossing Percy Machin at Pike Ave. Percy Machin is a two-lane, busy road that must be crossed in order to connect between the Levy Trail and streets leading to the Arkansas River Trail. Currently, cyclists and pedestrians have no way to safely cross the road at the end of the Levy Trail. The crossing point is barely visible to motorists, and they do not expect to see pedestrians and cyclists crossing this stretch of road. The following measures can be taken to make it safer for cyclists and pedestrians to cross

here:

i. Add crossing with parallel striping, and install signal light or flashers to alert motorists to the presence of crossing cyclists and pedestrians.
ii. Add stencil-painted roadway markings ahead of crossing to alert motorists.
iii. Install speed table and/or rumble strips prior to crossing on northbound and southbound lanes.

c. Crossing Pershing at Schaer St. Pershing Road is four lanes wide at Schaer St., with a center turning lane. Not only are there hazards to pedestrians and cyclists of through traffic on all four lanes, but there is also the hazard of cars attempting to turn onto Schaer from either direction within the space of the desired crosswalk. Safe crossing measures that can be taken include:
   i. Add painted crossing that extends across westbound and eastbound lanes of traffic.
   ii. Install yellow flashing lights for westbound and eastbound lanes of traffic that activate when pedestrians/cyclists approach to cross Pershing.
   iii. Add stencil-painted roadway markings and warning signs for northbound and southbound lanes to alert motorists to crossing.

d. Bicycle/pedestrian crossing at Verizon Way and Broadway intersection with yellow flashing lights

7.5.7 Other Infrastructure Improvements Requests. The following suggestions were made by the Bicycle Friendly Community Committee to enhance safety in specific areas along bike routes:

a. Place Stop sign at River Trail entrance west of Fike's Bikes; place sharrow after Stop line.
b. Stop sign at RV park entrance: place Stop sign before tree, back far enough to be visible by motorists.
c. Raise interstate signs on Percy Machin/Old Pike by 3ft or move to north side of Old Pike to allow cyclists' line of sight (see photo below)

7.5.8 Connectivity Concerns to be Resolved. The following areas of the City have been brought forth by the Bicycle Friendly Community Committee and members of the public as connectivity concerns for cyclists and pedestrians. No specific improvement suggestions were made at this time; however the committee recommends a greater focus on finding solutions in these areas:

a. Broadway crossing, Alpha St to Glenview Ln is difficult.
b. Charles H Boyer: turning left onto Military is difficult (for motor vehicles as well).
c. Military Drive: Bridge over I-40 is narrow and difficult to navigate when motor vehicle traffic is present.
d. Intersection of Championship Drive and Tournament Drive is difficult - need either signage or more education (traffic on Tournament Drive must yield to traffic coming from Championship Drive).

e. Pike Avenue from roundabout to Pershing difficult for cyclists and pedestrians due to wide road width, heavy traffic and high speeds.
f. Magnolia St from SA Jones to Broadway: traffic expected to increase due to new residential development. Explore possibility of off-street bike path parallel to Magnolia.

7.6 Goal Three – Education and Awareness. Improve bicycle safety education and awareness within the community.

Improved bicycle safety is likely to occur as a result of the development, communication and implementation of the Bicycle Plan, increased ridership, and education efforts. The education of the general public regarding best riding practices is an on-going task. The City's Safe Routes to School, or "Fit 2 School," program has incorporated bicycle and pedestrian education in four elementary schools since 2012, with the goal of expanding to reach at least 75% of NLR School District third graders in the 2013-2014 school year.

Active implementation of nationally standardized signage and roadway markings will serve to increase awareness by motorized vehicles and bicyclists alike, thus increasing safety. Diligent efforts through the local media may have an impact on motorist behavior, for example the City's 2013 3-foot passing law awareness campaign. More information on the 3-foot campaign is available at http://nlrfit2live.org/fit-2-get-active/#nlr-bicycle-friendly-community-committee.

Another means of educating motorists is through driver education programs and the State Driver's Licensing Program. The Arkansas State Police recently updated their driver's license manual, and included a section about sharing the road with bicycles. The manual is available at http://www.asp.state.ar.us/divisions/hp/pdf/dl%20study%20guidevol%201%20edition%206_august%202011.pdf. The bicycle section begins on page 44.

Two bicycle-related questions have been added to the driver's exam:

When you are passing a bicycle and an oncoming vehicle is approaching, you must:
a) slow down and let the vehicle pass first
b) stop and move to the shoulder
c) accelerate and pass the bicycle quickly
d) blow the horn to alert the bicyclist

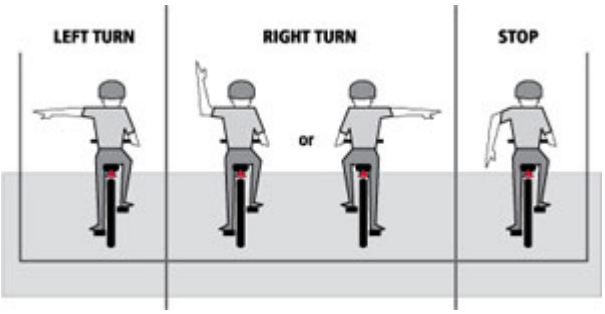
Do not share a lane with _____ , because they need extra space.
a) motorcycles
b) pedestrians
c) bicyclists
d) All of the above

However, the driver's exam will miss the great majority of motorists who renew their driver's license without additional testing. One effort that might help is distributing pamphlets when renewing driver's licenses.

Additional educational efforts implemented by the City in 2012-2013 include offering Traffic Cycling Skills 101 courses and training 13 new League Cycling Instructors to serve North Little Rock as Bicycle Ambassadors.

Smart Cycling Rules of the Road from the League of American Bicyclists: http://www.bikeleague.org/resources/better/roadrules.php

a. Follow the Law. Your safety and the image of bicyclists depend on you. You have the same rights and duties as drivers. Obey traffic signals and stop signs. Ride with traffic; use the rightmost lane headed in the direction you are going.
b. Be Predictable. Make your intentions clear to motorists and other road users. Ride in a straight line and don't swerve between parked cars. Signal turns, and check behind you well before turning or changing lanes.
c. Use the following arm signals:



d. Be Conspicuous. Ride where drivers can see you; wear bright clothing. Use a front white light and red rear light and reflectors at night or when visibility is poor. Make eye contact with drivers. Don't ride on sidewalks.
e. Think Ahead. Anticipate what drivers, pedestrians, and other bicyclists will do next. Watch for turning vehicles and ride outside the door zone of parked cars. Look out for debris, potholes, and utility covers. Cross railroad tracks at right angles.
f. Ride Ready. Check your tires have sufficient air, brakes are working, chain runs smoothly, and quick release wheel levers are closed. Carry repair and emergency supplies appropriate for your ride. Wear a helmet.
g. Keep Your Cool. Road rage benefits no-one and always makes a bad situation worse.

Additional cycling tips available at: http://www.bikeleague.org/resources/better/index.php.

7.7 Goal Four – Encouragement. Encourage bicycling as a means of transportation.

Many cyclists perceive local streets as a relatively dangerous setting for cycling. Riding on streets with slow traffic speeds and low traffic volumes provides a good setting for cyclists, but separated trails are often the preferred choice. The primary way of encouraging greater bicycle transportation is to fully implement the Bicycle Plan as proposed.

7.8 Implementation. Development of these routes is likely to be the result of a combination of efforts, including the following suggestions:

a. The North Little Rock Bicycle Plan shall be revised annually to provide a current statement of community intentions and support.
b. The Master Street Plan shall be modified to provide additional pavement widths as recommended in the Bicycle Plan or other locations where special accommodation is needed.
c. Funding opportunities should be investigated, such as implementing specific projects through the Arkansas Highway & Transportation 50/50 match program, the State Parks Outdoor Recreation Program, and through competition for MAP21 Transportation Alternatives Program funds available through the local Metropolitan Planning Organization. Additional State Enhancement funds may be available to develop elements of the plan.
d. Funds from City Capital Improvement allocations should be made available for incremental implementation of the Bicycle Plan.
e. Local neighborhood organizations should work with their Ward Aldermen to secure funding for specific elements of the Plan.
f. The off-street parking section of the Zoning Ordinance should be amended to require that bicycle parking is made available for all new commercial development and major renovations.
g. Appropriate markings (signage and roadway markings) should be used in order to make the Bicycle Plan visible in the daily lives of citizens, thereby increasing awareness among cyclists and motorists.
h. The City has adopted a Complete Streets policy to safely accommodate all modes of transportation. Roads being resurfaced or rebuilt should be automatically considered for bicycle and pedestrian facilities in coordination between the Mayor's Office/Fit 2 Live, Engineering, and Community Planning departments.
i. Bicycle facility improvements requested by the Bicycle Plan should be designed and made "shovel ready" for available funding and grants.
j. Private funding may also assist in implementing the Bicycle Plan.
k. The City shall leverage its Bicycle Friendly Community committee and Bicycle Ambassadors to advocate for implementation and provide community service to encourage cycling among all demographic groups.
l. Maintenance: The City shall ensure that bike lanes and enhanced roadway shoulders are swept regularly and kept free of debris.

7.9 Cost Estimates of Implementation

a. Striping Bike Lanes – A survey of city streets revealed approximately 45,000 linear feet of available roadways identified on the Bicycle Plan Map as having enough pavement width available to stripe bike lanes or enhanced roadway shoulders without modification of the roadway width. Adding this striping would be a quick and immediate boost to these streets' functionality for cyclists. A 4 inch white continuous stripe costs about $0.44/linear foot. Estimated cost of implementing the entire system of striped bike lanes is about $19,800.
b. Street Widening to Add Bike Lanes/Shoulders – There are approximately 91,436 ft. of proposed bike lanes/shoulders. For planning purposes, the estimated cost for widening a street to add paving for bike lanes is between $100-200/linear ft. or about $9-$18 million for the entire system.

c. Placing Sharrows on Routes – The survey of city streets for proposed routes with sharrows indicated the need for approximately 175 sharrows throughout the city. Placing sharrows on designated routes will immediately increase motorist awareness of the presence of cyclists and identify preferred routes for cyclists. Sharrows cost approx. $250/each. The cost estimate of placing sharrows on designated routes of the bike plan is approx. $43,750.
d. Bike Route Signs – Signage is needed on all designated paths, lanes, and routes of the Bicycle Plan. A standard highway traffic sign costs approx. $40 and the post costs approx. $75. The estimated total cost of signs on the Bicycle Plan is $78,200: $10,350 for 90 signs along routes with sharrows, $16,100 for 140 signs along streets with bike lanes/shoulders, and $51,750 for 450 signs along routes with no other markings.
e. Bike Racks – Single-hoop bike racks cost approx. $110 each. The City currently has bike racks in-stock, so there is no need to purchase additional racks at this time.
f. Bike Trails – The estimated cost is $60 per linear foot not counting the additional right-of-way costs. Completing the 72,122 ft. of proposed trails or paths is estimated to cost $4.3 million.

7.10 Design Standards.

Bike Paths are most commonly designed for two-way travel, with the users being non-motorized bicyclists, inline or roller skaters, skateboarders, motorized or non-motorized wheelchair users, and pedestrians, including walkers, runners, people with baby strollers, and people walking domestic pets.

Two-directional shared use paths shall have a minimum paved width of 12 ft. plus a minimum 1 ft. wide graded area, free of obstacles, with a maximum 1:6 slope adjacent to both sides of the shared use bike path. Where used on a shared use path, no portion of a sign or its support shall be placed less than 2 ft. laterally from the edge of the path, or less than 8 ft. vertically over the entire width of the path. The clearance for overhead signs should be adjusted to accommodate maintenance or emergency vehicles and equestrian users when applicable.

Bike Lanes are within the roadway, are one-way and carry bicycle traffic in the same direction as adjacent motor vehicle traffic. Lanes delineate road space for the exclusive use by cyclists. Bike lanes must be at least 4 ft. wide when there is an open shoulder, or 5 ft. from face of curb when a curb is present.

Where parking is permitted but a parking stripe or stalls are not utilized, the shared area should be a minimum of 11 ft. without a curb face and 12 ft. adjacent to a curb face.

Bike lanes shall be delineated from the motor vehicle travel lanes with a 6 inch solid white line. A 4 inch solid white line can be placed between the parking lane and the bike lane to encourage parking closer to the curb. In no instance shall a bike lane be between the curb and the parking lane of vehicles. Markings for bike lanes should be placed at the beginning of a bike lane and at periodic intervals along the bike lane based on engineering judgment. The American Association of State Highway and Transportation Officials (AASHTO) *Guide for the Development of Bicycle Facilities* contains in depth guidelines for marking bike lanes at intersections and crosswalks. It is recommended that this publication be used as a guide for marking bike lanes within the city.

Enhanced Roadway Shoulders
Adding paved shoulders can greatly improve accommodation for cyclists on roadways with higher speeds or traffic volumes, in addition to benefiting motorists. Paved shoulders are not bike lanes and can be used for on-street parking or disabled vehicles. Shoulders stay on the right of the right turning lane whereas bike lanes stay to the left of the right turning lane. Shoulders should be at least 4 ft. wide or 5 ft. if against a guard rail or curb.

Bike Routes are designated roadways where pavement is shared by both motorists and cyclists with no special provision for cyclists except the signing of the bike route. Bicycles are permitted on all streets and highways, but are prohibited from interstate freeways. Designated routes provide connections to other features of the Bicycle Plan such as bike lanes and bike paths. Routes also connect local neighborhood streets and collectors to points of interest such as schools, parks, and commercial areas.

Rumble strips have been used on many State Highways to prevent vehicles from veering off the road. When these are used, a 4 ft. shoulder should be provided for cyclists and 12 ft. gaps provided to allow cyclists to move across the rumble strip.

Bike Parking Racks are an essential element in promoting cycling in the community. Bike racks offer safety from theft and damage. This encourages more use of bicycles for everyday trips, and cyclists are more likely to patronize businesses and services that provide racks. Bike racks should be designed so that they:

a. Do not damage wheels or other parts of the bicycle,
b. Do not impede or interfere with pedestrians,
c. Accommodate locks of varying styles and functions,
d. Are easily accessed from the bike path, lane, or route, and
e. Are protected from motorized vehicles.

ARTICLE 8. ACCESS MANAGEMENT PLANS

8.1 Access Management. Urban areas face a constant struggle to maintain the integrity of major traffic arteries. These arteries exist for the primary purpose of moving large volumes of traffic in the most unimpeded manner possible from one point to another. The most efficient design limits access to major intersections and eliminates at-grade crossings of other intersections. Unfortunately, the success of arterials in moving large volumes of traffic makes them a prime target for commercial interests. The developers of such projects seek direct access to traffic arteries and often exhibit the political power or expertise to obtain such access. This, in turn, diminishes the ability of the artery to carry traffic, resulting in congestion and the demand to build additional arteries.

Access Management provides tools to deal with land uses abutting or otherwise served by a roadway, while preserving the safe and efficient flow of traffic on the roadway system. It applies basic traffic engineering principles to the location, design and operation of access drives serving activities along the roadway. It also evaluates the suitability of providing access to a given road, as well as the suitability of a site for land development. It is a way of determining when and where access should be located, how it should be designed, and the procedures needed to administer the program. In other words, it properly manages the competing needs of traffic movements and the demands for access to different land uses.

Access management includes classifying roadways based upon functional criteria, defining allowable levels of access for each roadway class, including spacing requirements for median openings, driveways, and signals, applying appropriate geometric design and traffic engineering analysis criteria, and adopting implementing regulations and administrative procedures.

The City of North Little Rock has identified four arterials in its urban area that require access management plans. These include portions of:

a. Arkansas Highway 391
b. U.S. Highway 165
c. Maumelle Boulevard
d. Pike Avenue / Riverfront Drive corridor

The following sections document the existing conditions and the measures adopted for each of the arterials. As new arterials or segments of arterials are identified in the future, they will be added to this plan.

8.2 Arkansas Highway 391. Arkansas State Highway 391 is a vital north-south arterial connecting US Highway 70 to Interstate 40. Currently, it carries 4,000 vehicles per day (vpd), north of Hwy 70, to 9,300 vpd, over I-40. This is forecasted to increase to 10,500 vpd by 2025. Not only does this arterial serve local traffic, it also serves the City's main industrial area. Consequently, there is a very high percentage of truck traffic (24%), resulting in a volatile traffic mix. Moreover, there are high volumes of turning movements associated with this traffic due to the abutting land uses. This creates a dangerous driving environment.

Highway 391/Galloway is a minor arterial on the City master street plan and serves as a roadway connecting the City to its industrial area. The secondary purpose is to increase the safety for drivers and pedestrians that use this facility. It is the intent of this plan to provide access to abutting properties consistent with the primary and secondary objectives.

This access management agreement pertains to State Highway 391, also known as Galloway, from State Highway 70 north to Interstate 40 Frontage Roads (1,300 ft.). See Route Map.

8.2.1 Access Criteria.

a. A minimum spacing of 200 ft. for future connections (e.g. driveways, etc.) to the Roadway.
b. A minimum corner clearance of 125 ft. from point of intersection (PI) to the edge of the connection.
c. A maximum of two connections for each roadway segment within the limits specified in this agreement.
d. The standards are to be applied during plat review prior to development, or redevelopment, approval by the City.

8.3 Highway 165 – Access Management Plan. Highway 165 is a radial arterial leading southeast from North Little Rock. The properties along the highway are currently in various stages of development. The purpose of the plan is outlining methods of granting access to new developments while maintaining an acceptable level of safety, and protecting the capacity and level of service of the roadway

The highway has a parallel levee from I-440 to Highway 391 and also a rail spur near I-440. The rail line had previously continued along the highway connecting to Pine Bluff but was abandoned in the 1970's.

All property in the area is part in the Arkansas River flood plain, the land is flat and fertile. Soils of the area are generally sandy loam, which present no physical constraints to urban development.

Urban development has been relatively slow to emerge in this area but in the past decade there has been significant industrial, commercial and residential developments and additional development proposals have been discussed. Several large residential subdivisions are being reviewed in the general area as well as additional industrial and several commercial developments. The 1500-acre, Fulkerson property has been planned as a high quality mixed use commercial, office and residential area. Favorable zoning has been provided to allow the proposed high density urban development. Consequently, the development of this corridor is likely to intensify in the near future.

Highway 165 is classified as a principal arterial on the City Master Street Plan as well as the regional transportation plan. The typical design for a principal arterial is a four to six lane median type parkway or freeway. There is no major project proposed and no funding available to widen Highway 165 to the eventual design. This plan proposes design elements to incorporate with major development in the interim period.

8.3.1 Access Criteria.

a. The donation of the additional right-of-way shall be a condition of approval on all proposed plats or with new primary structures that front onto Hwy 165.
b. Quarter mile spacing shall be maintained between all proposed intersecting streets.
c. Turning bays shall be installed at street intersections or where commercial driveways are proposed to move turning traffic out of the travel lanes.
d. Driveways shall be permitted with the goal of minimizing congestion and reducing traffic hazards. Techniques to be used include:
1. large acreage development may be restricted to one or two access points;
2. shared driveways shall be used where appropriate; and
3. driveways on smaller lots shall be developed to allow driveways at 300 ft. separations or 300 ft. to the nearest street intersection.
e. Cross-access easements and driveway frontage connections shall be included with all commercial developments to allow connections between lots. The drives shall be near the front building line and extend to the side property line when adjoining vacant lots.
f. A 30 ft. curb radius shall be required on driveways where a deceleration or acceleration lane is not provided.
g. The shoulder shall be widened to 14 ft. to provide for a deceleration and acceleration lane.

8.4 Maumelle Boulevard - Access Management Plan. The minimum driveway spacing for Maumelle Boulevard is 330 ft. between the driveway centerlines. No subdivision may create any lot fronting on an Other Freeway or Expressway having a width less than the recommended minimum driveway spacing, unless one of the following conditions is met:

a. Access to the lot is limited to streets other than Maumelle Boulevard.
b. Access to the lot is provided jointly with other lots such that the minimum driveway spacing is met.
c. Access to the lot is ultimately to be provided from a frontage road which has been planned and officially approved.

If the Planning Director is satisfied that attempts to secure access via a local street have been made and access is determined unavailable, and access cannot be secured through joint access with abutting parcels, driveway access may be granted to the Other Freeway or Expressway facility if minimum corner clearances and other design measures, such as driveway spacings, are met. However, this access should be limited to right turns. Where excessive access points are conceded, an additional service lane should be added to minimize traffic conflicts.
Where conditions dictate, a one-way drive entrance before the intersecting collector or an exit after the collector may be permissible in the storage lane, beyond the taper, with the review and approval of the City Engineer or Planning Director. A distance of 330 feet is the recommended minimum spacing from the center line of a private drive to the center line of the intersecting collector roadway. The minimum spacing allowed for the first private driveway on the collector is 165 feet from the center line of Maumelle Boulevard to the center line of the private driveway. Other design features for Maumelle Boulevard are illustrated on detailed geometric design drawings prepared by Pulaski County Office of Planning and Development.

8.5 Pike Avenue / Riverfront Drive Corridor – Access Management Plan. Pike Avenue, Highway 365, is a designated principal arterial of the City's Master Street Plan and the regional functional classification system. The roadway is a major route from I-40 to the Little Rock and North Little Rock downtown areas. Current traffic volumes are approximately 21,000 vehicles per day. The roadway was reconstructed south of West Pershing to a five-lane design around 1990. Little new development has occurred since the reconstruction of the roadway. The five lane design allows for a high level of access to adjoining property while maintaining relatively high traffic capacity.

The roadway was widened by expanding pavement to the west side of the existing pavement and all driveways along the east side of the street were restored by the State. There is a large amount of residual property along the west side of the roadway that remains undeveloped and there are no driveways along the western side of the highway. The lack of redevelopment and no new driveways along the western side of Pike has meant that roadway turning conflicts have been minimized and the roadway has been maintained with a relatively high traffic carrying capacity at increased travel speeds.

The neighborhood street pattern south of West Pershing is the traditional grid street pattern with most blocks being between 270 ft. and 300 ft. widths. This neighborhood pattern provides a very high level of travel as there are many alternative routes to any destination. Traffic lights are located at 16th, 22nd, and West Pershing Avenue. The Pike Avenue round-a-bout at 3rd Street is the latest addition on the corridor. This round-a-bout continues the high level of traffic service by avoiding delays caused by signals, while allowing for traffic to flow at crossing streets.

As the City considers releasing property to redevelopment, it is the goal of the City to retain a high level of traffic service while maintaining a high level of traffic safety through minimizing traffic conflicts. Adopting this access management plan and policy will provide future guidance to retain the relatively high traffic capacity with limited conflicts.

8.5.1 Corridor Description

The corridor shall include all properties abutting Pike Avenue and Riverfront Drive between West Pershing and Interstate 30.

8.5.2 Access Criteria.

a. To retain the high level of traffic service and safety by limiting new driveways to side streets along the Pike Avenue and Riverfront Drive corridor. All new driveways proposed along the west side of Pike Avenue must have the recommendation of the Planning Commission and approval from the City Council.
b. To include cross-access easements with all new development parking lots along the west side of Pike Avenue. This easement may be aligned with the existing paved alley along Pike.

8.5.3 General Access Management

The goal of access management is to support traffic flow, reduce roadway accidents, and reduce the need for reconstruction through the management of access on roadways. Some of the general policies might include denying driveways from single family residential parcels onto all roadways other than local streets. Experience has found that proper management of roadway access reduces traffic accidents by limiting conflict points. Access management can also serve to improve the quality of travel throughout the community, while enhancing land values.

ARTICLE 9. TRAFFIC CALMING

The urban built environment involves how roadways are designed and how buildings are placed adjoining these travel ways. In residential areas, there is a common theme of supporting a front yard setback of 25’ with a primary purpose of allowing for parking in front of a dwelling and have the vehicle not block the sidewalk.

Neighborhoods should be quiet places where children are allowed to grow without the fear of traffic. To accomplish this goal, most local neighborhood streets have posted travel speeds of 20 MPH or lower. Other techniques might include traffic calming the discourage fast traffic. Examples include limiting pavement widths. The standard local residential street typically has a pavement width of 26’ face of curb to face of curb. This allows on street parking, consuming 16’ of that pavement. This restricts travel speeds and often requires vehicles to stop and share the remaining travel space.

Street trees along residential streets may also slow traffic speeds as the perceived travel path appears restricted. Buildings close to the front property line is another technique that can slow travel speeds.

Local streets serve an important service of providing access to property but a pleasant neighborhood will be so designed to allow the setting to be free from fast traffic.

ARTICLE 10. TRAFFIC FLOW TECHNIQUES

The Master Street Plan provides for a system of roadways to provide for a high level of traffic service to serve the demand. This network is often restricted by cross town intersections. Traffic signals are the typical response to sharing streets and crossing traffic patterns. The use of roundabouts has been found to be an enhanced measure to improve traffic flow at lower operating costs, reduce traffic accidents, and to limit the severity of accidents. The Master Street Plan identifies many locations where roundabouts are recommended.

ARTICLE 11. IMPLEMENTING THE MASTER STREET PLAN

The MSP lists existing conditions and recommended improvements. Having a plan is important and it is a prerequisite for conducting Control of Development and Subdivision Regulations. There are a number of strategies for accomplishing the MSP: (1) boundary improvements with new development, (2) public improvements by coordinating improvements with the State, (3) public improvements through City sponsored improvements, and (4) private improvements through coordinated improvement districts.

11.1 Development contributions. When development is proposed, the City can require the development to comply and construct according to the design included in the Master Street Plan. The basis for exactions is that development should pay the impacts caused by new developments and that includes upgrading the boundary street according to the plan indicated on the MSP.

Compliance to provisions of the Master Street Plan include: (a) the appropriate right-of-way, and (b) a street widening. Often, it is desirable to coordinate the improvement with a larger project and the City allows a financial contribution in the amount required for the development boundary touching the street. The City must use deposited funds in a reasonable period of time or return the exaction to the developer. A three year period is most often cited as a reasonable time to hold private funds devoted to a road improvement.

11.2 Waiver procedures. When the Planning Commission recommends waiver of the standards required through the Master Street Plan, it is appropriate to obtain the approval the City Council as it is the governmental body that adopted the City's Plan.

11.3 Public Improvement Projects. Streets and highways are most often upgraded or reconstructed through specific public improvement project; such as reconstruction of a commuter route or installation of a rail overpass. The projects occur when funding opportunities emerge based on available funds from dedicated sources. The new State Sales Tax to support roadway improvements is one example. Traditionally, federal funding was directed to the area based on federal authorizations from fuel tax sources.

When funding opportunities are announced, typically the local government is requested to propose its priority for improvement. The Master Street Plan can serve as a guide for the selection among options.

The local government has the authority to advance funding mechanisms to improve transportation infrastructure. One example is a bond program dedicated to specific roadway improvements. The City of Fort Smith has for the past 20 years funded a sales tax dedicated to improving the local transportation system. North Little Rock has not initiated such dedicated funding programs.

Many cities maintain an ongoing Capital Improvement Program where elements of the adopted transportation plan are upgraded with dedicated local funding sources. Such programs provide developers confidence that new development does not pay for all planned improvements. A mature city may not choose such an option as roadway development has matured and few upgrades are required.

11.4 Private Improvement Programs. State law allows for the creation of road improvement districts where local property assessment funds specific local roadway infrastructure improvements. These type of programs are rare but have occurred. A recent example was the Counts Massie Road and Sewer Improvement District.

11.5 Planning Advances Priorities. Developing a consensus or vision for the future is a good first step in achieving the future community. The Master Street Plan is one tool to express the community vision. The Plan should be reviewed periodically and brought to the attention of community leaders to discuss ways of advancing civic improvement and to generate local champions who may make it their goal of advancing plan elements.

ARTICLE 12. ROADWAY PLAN BY IDENTIFIED SEGMENTS

The Master Street Plan includes an appendix section identifying existing and planned design by segments. This table includes segments for all roadway classifications except the local or residential classification. Further, the table includes the following information columns:

a. administrative system
b. the roadway name
c. a description of the segment location
d. the recommended cross-section design including the recommended right-of-way, pavement, and number of travel lanes.

Street Name	From-To	ROW Plan	Pave Plan	Lanes Plan	Bike Lane	ROW Exist	Pave Exist	Lanes Exist
Freeway								
Hwy 67/167	I-40 to McCain	300	0	6	N	300	0	4
Hwy 67/167	McCain to NLR C.L.	300	0	6	N	300	0	4
I 40	Marche to I-430	300	0	6	N	300	0	4
I 40	I-430 to Highway 176	300	0	6	N	300	0	6
I 40	Hwy. 176 to MacArthur	300	0	6	N	300	0	6
I 40	MacArthur to I-30	300	0	8	N	300	0	6
I 40	I-30 to 67/167	200	0	8	N	200	0	8
I 40	67/167 to Hwy. 161	300	0	6	N	300	0	4
I 40	Hwy.161 to I-440	300	0	6	N	300	0	4
I 40	I-440 to Lonoke Co.	300	0	4	N	300	0	4
I-30	I-40 to 7th St.	180	0	10	N	180	0	6
I-30	7th St. to AR River	180	0	8	N	180	72	6
I-430	I-40 to Maumelle	300	0	6	N	300	0	6
I-430	Maumelle to AR River	300	0	6	N	300	0	6
I-440	67/167 to I-40	300	0	6	N	300	0	4
I-440	I-40 to Hwy. 70	300	0	6	N	300	0	6
I-440	Hwy. 70 to Faulkner Lake	300	0	6	N	300	0	6
I-440	Faulkner Lake to Hwy. 165	300	0	6	N	300	0	6
I-440	Hwy. 165 to AR River	300	0	6	N	300	0	4
North Belt	I-40 to Hwy. 365	300	0	6	N	0	0	0

Street Segment Table 1

Street Name	From-To	ROW Plan	Pave Plan	Lanes Plan	Bike Lane	ROW Exist	Pave Exist	Lanes Exist
Principal Arterial								
Baucum Pike	E. Broadway to Prothro St	80	36	3	N	60	24	2
Baucum Pike	Prothro St to I-440	80	36	3	N	60	24	2
Broadway Bridge	AR River to W. Broadway	100	48	4	N	100	44	4
Broadway, E	Main to I-30	70	48	4	N	60	40	4
Broadway, E	I-30 to Vine	80	64	5	N	80	64	5
Broadway, E	Vine to Smothers	80	64	5	N	80	64	5
Broadway, E	Smothers to 165	80	64	5	N	80	64	5
Broadway, W	Broadway Br. to Willow	80	48	4	N	80	46	4
Broadway, W	Willow to Main	80	48	4	N	80	40	4
Chester Street Bridge		80	36	2	N	0	0	0
Hwy. 165	I-440 to AR 391	130	64	4	N	100	44	2
Hwy. 165	AR 391 to Lonoke Co.	130	64	4	N	100	44	2
JFK	North Hills Blvd. to Osage	90	60	5	N	90	60	5
JFK	Osage to Kierre	90	48	4	N	90	48	4
JFK	Kierre Rd. to McCain	90	60	5	N	90	60	5
JFK	McCain to H St.	90	60	5	N	90	60	5
JFK	H St. to I-40	90	48	4	N	90	48	4
MacArthur	Cedar Ln to Crystal Hill	120	36	3	N	120	24	2
MacArthur	Crystal Hill to Military	120	36	3	N	120	24	2
MacArthur	Military to Landski	120	52	4	N	120	24	2
MacArthur	Landski to I-40	130	64	5	N	200	42	3
MacArthur	I-40 to W. Pershing	200	60	4	Y	200	36	3
Maumelle Blvd.	City Limits to Crystal Hill	200	72	6	N	200	48	4
Maumelle Blvd.	Crystal Hill to I-430	200	72	7	N	200	64	5

Street Segment Table 2

Street Name	From-To	ROW Plan	Pave Plan	Lanes Plan	Bike Lane	ROW Exist	Pave Exist	Lanes Exist
Principal Arterial								
Pike Ave.	W. Pershing to 8th	80	64	5	N	80	64	5
Pike Ave.	8th to Broadway	80	64	5	N	80	60	4
Riverfront Dr	Broadway to E. 13th	80	52	4	N	0	0	0
Riverfront Dr.	Pike to I-30	150	64	4	N	150	64	4
Riverfront Dr.	I-30 to E. Broadway St.	150	64	5	N	150	64	5

Street Name	From-To	ROW Plan	Pave Plan	Lanes Plan	Bike Lane	ROW Exist	Pave Exist	Lanes Exist
Minor Arterial								
Batesville Pike	Remount to	0	0	0	N	0	0	0
Broadway, E	Hwy. 165 to Omega	80	64	5	N	60	48	4
Broadway, E	Omega to 161	80	64	5	N	60	48	4
Broadway, W	Pike/Riverfront to 4th	70	24	2	N	50	22	2
Broadway, W	4th to Karrot	60	36	3	N	50	22	2
Broadway, W	Karrot to Broadway Bridge	60	48	4	N	50	22	2
Camp Robinson	Latona St. to 52nd	80	48	3	Y	40	36	3
Camp Robinson	52nd to 47th	80	48	4	N	60	36	3
Camp Robinson	47th to Schaer	80	60	5	N	80	60	5
Camp Robinson	Schaer to Pike	60	36	3	N	60	36	3
Charles Boyer Dr	I-40 to MacArthur	80	48	3	Y	60	40	2
Colonel Maynard	180' south of Hwy 165 to Craig Rd.	80	38	2	N	50	24	2
Colonel Maynard	Colonel Maynard to Highway 165	80	36	3	N	0	0	0
Counts Massie Rd	Country Club to Interchange I-40	80	44	4	N	50	24	2
Crystal Hill	Maumelle Blvd to Kampground	100	64	5	Y	100	60	5
Crystal Hill	Kampground Way to I-40	100	64	5	Y	60	24	2
Doyle Venable	MacArthur to Camp Robinson	80	64	5	N	80	60	5
Hwy. 161	49th to Fairfax	80	36	3	N	60	24	2
Hwy. 161	Fairfax to I-40	80	64	5	N	80	64	5
Hwy. 161	I-40 to Broadway/Hwy. 70	80	64	5	N	60	36	3
Hwy. 391	Dick Jeter Rd. to realignment	80	36	3	N	0	0	0
Hwy. 391	realignment to Hwy. 165	80	36	3	N	50	20	2
Hwy. 391 Realignment		80	30	2	N	0	0	0

Street Name	From-To	ROW Plan	Pave Plan	Lanes Plan	Bike Lane	ROW Exist	Pave Exist	Lanes Exist
Minor Arterial								
Hwy. 70	Hwy. 161 to I-440	80	48	4	N	60	24	2
Hwy. 70	I-440 to Harris	80	60	5	N	60	24	2
Hwy. 70	Harris to Lonoke Co.	60	24	2	N	60	24	2
Main	I-40 to W. Pershing	80	60	5	N	80	60	5
Main	W Pershing to 15th St.	60	48	4	N	60	48	4
Main	15th St. to 8th St. (Bridge)	70	48	4	N	70	44	4
Main	8th St. to Broadway	70	44	3	N	70	44	3
Main	Broadway to Main St River Bridge	70	49	3	N	70	44	3
Maple	Main St. Bridge to 3rd St.	60	48	3	N	60	48	3
Maple	3rd St. to 8th St.	60	48	3	N	60	48	3
McCain	Ridge to High Hill	80	48-52	5	N	80	48	5
McCain	High Hill to JFK Blvd	80	48-52	4	N	80	48	4
McCain	JFK Blvd to N. Hills	80	52	4	N	80	48	4
McCain	N. Hills to 67/167	80	56	4 5	N	80	48	4
McCain, E	67/167/ to Spring Hill	100	60	6	N	100	60	5
McCain, E	Spring Hill to Smokey	100	60	5	N	80	56	5
McCain, E	Smokey to Richards	100	60	4 or 5	N	80	56	4
McCain, E	Richards to Fairfax	100	60	4	N	80	48	4
McCain, E (Fairfax)	Roundtop to Hwy 161	100	60	4	N	60	34	2
North Hills Blvd.	15th St. to I-40	80	36	2	Y	60	24	2
North Hills Blvd.	I-40 to Barbra	100	56	4	Y	80	56	4
North Hills Blvd.	Barbra to Justin Matthews	80	36	2	Y	80	34	2
North Hills Blvd.	Justin Matthews to Crestwood	80	48	4	N	80	48	4
North Hills Blvd.	Crestwood to Calico Creek Dr	80	36	3	Y	80	24	3
North Hills Blvd.	Calico Creek Dr. to City Limits	80	36	2	Y	80	24	2

Street Name	From-To	ROW Plan	Pave Plan	Lanes Plan	Bike Lane	ROW Exist	Pave Exist	Lanes Exist
Minor Arterial								
Oak Grove Road	Hwy 365 (MacArthur) to I-40	80	36	3	N	0	0	0
Percy Machin	33rd St. to W. Pershing	80	52	4	N	80	48	4
Pike Ave.	33rd St. to 34th St.	80	52	4	N	80	50	4
Remount	Latona to Maryland	80	36	3	Y	60	24	2
Spring Hill	I-40 to McCain	80	60	5	N	80	60	5
W. 37th St.	Pike to Camp Robinson	80	64	5	N	80	60	5
W. 47th St.	Camp Robinson to Ridge	80	52	4	N	80	52	4
W. Maryland Ave.	Batesville Pike to e. city limit	80	36	3	N	60	19	2
W. Pershing	Pike to Percy Machin	90	60	5	N	90	60	5
W. Pershing	Percy Machin to Main	80	48	4	N	80	48	4

Street Name	From-To	ROW Plan	Pave Plan	Lanes Plan	Bike Lane	ROW Exist	Pave Exist	Lanes Exist
Commercial-Industrial Collector								
7th Street	N. Broadway to Willow	80	40	3	N	80	40	3
7th Street	Willow to Main	60	40	3	N	60	36	2
Alexander Rd.	Hwy. 165 to Walkers Corner Rd.	70	40	2	N	50	20	2
Batesville Pike	NLR PBdry. to W. Maryland	60	36	3	N	60	24	2
Beech	7th to E. 5th	60	36	2	N	60	36	2
Bethany Rd.	Hwy. 161 tp Van Pelt	70	48	4	N	60	48	4
Bethany Rd.	Van Pelt to Sam Evans Dr.	70	36	2	N	0	0	0
Bishop Lindsey	Main to Locust	60	36	2	N	60	36	2
Central Airport Rd	Highway 70 to north of I-40	70	36	3	N	50	24	2
Charles Boyer Dr	I-40 Ramp to Military	60	36	3	Y	0	0	0
Coll Street 2	Valentine to Wooten Road	70	40	2	N	0	0	0
Counts Massie Rd	Maumelle Blvd. to Country Club	80	52	4	N	80	28	2
Counts Massie Rd	Crystal Hill to Maumelle Blvd.	80	52	4	N	50	24	2
Crystal Hill	Maumelle Blvd to Paul Eells Dr	60	40	3	N	60	40	3
Dixie/Luster	E. Broadway to Bethany	70	40	2	N	50	20	2
Donovan Briley	Camp Robinson to Military	100	60	4	Y	100	42	3
E Washington Ave	Hwy 100 to Hwy. 70	60	40	3	N	60	36	3
E. 13th Street	Main St to N. Locust	60	40	3	N	40	30	2
E. 13th Street	N. Locust to North Hills Blvd.	60	40	3	N	60	34	3
E. 4th St.	Cypress to Locust	60	40	2	N	0	0	0
E. 46th St Ext.	Highway 440 to Coll St 2	60	40	2	N	0	0	0
E. Access Rd	E. McCain Blvd Ext. to Eanes Rd	60	40	2	N	0	0	0
E. McCain Ext.	Highway 161 to E. 46th St.	70	40	3	N	0	0	0
Hwy. 70	Harris to Lonoke Co.	60	24	2	N	60	24	2
Landers	McCain to NLR Limits	60	36	2	N	60	34	2

Street Name	From-To	ROW Plan	Pave Plan	Lanes Plan	Bike Lane	ROW Exist	Pave Exist	Lanes Exist
Commercial-Industrial Collector								
Landski	MacArthur to Parkway	80	52	4	N	60	40	2
N. Broadway	E. Broadway to 7th	80	40	3	N	50	30	3
N. Locust St	SA Jones to 13th	70	44	4	N	0	0	0
Northshore Dr	Crystal Hill to Young Rd	80	40	2	Y	0	0	0
Northshore Lane (*1)	Young Road to Crystal Hill Road	70	36	2	N	0	0	0
Old Hwy 30	Walkers Corner to Highway 165	70	36	2	Y	50	24	2
Old Hwy 67	Fairfax to Trammel	60	24	2	N	60	24	2
Parkway	Landski to Division	60	36	3	N	60	24	2
Paul Eells Dr	Maumelle Blvd to Counts Massie	60	40	2	N	60	0	0
Richardson Dr	Paul Eells to Counts Massie	60	40	2	Y	60	0	0
River Pointe Dr	Maumelle Blvd to end of built	100	48	4	N	100	48	2
River Pointe Dr	End of built to Counts Massie	100	48	4	N	100	48	2
SA Jones Dr	Main to Locust	60	36	2	N	60	36	2
Smokey Lane	McCain Blvd. to E 43rd St	70	40	3	N	50	36	2
Smokey Lane	E 43rd St to Landers	70	40	3	N	50	36	2
Smokey Lane	Springhill Dr. to McCain Blvd	70	48	4	N	70	48	4
Smothers	7th to E. Broadway	60	36	2	N	60	36	2
Smothers	E. Broadway to E. Washington	60	36	2	N	60	36	2
Vestal Extension	Maumelle to W. Bayou Crossing	80	40	2	N	0	0	0
Vestal Extension	Crystal Hill to Maumelle Blvd	80	40	2	N	0	0	0
W. 47th St.	Pike to Camp Robinson	60	40	2	N	50	22	2
W. 9th St	Maple to Main	60	40	2	N	60	20	2
W. Access Rd	E. McCain Blvd Ext. to Eanes Rd	60	40	2	N	0	0	0
W. Keihl Extension	Remount Rd. to W. Kiehl	80	36	3	N	0	0	0
Warden Rd	McCain to NLR Limits	60	36	3	N	60	24	2
Footnote (*1) The specific road alignment south of White Oak Bayou may be set by the property owner.								

Street Name	From-To	ROW Plan	Pave Plan	Lanes Plan	Bike Lane	ROW Exist	Pave Exist	Lanes Exist
Residential Collector								
Avondale	Waterside to Lakeview	60	30	2	N	60	28	2
Barbara	North Hills to Lakeview	60	36	2	Y	60	36	2
Bishop Lindsey	Locust to Beech	60	44	2	N	60	34	2
Bridgeway	Westwind to Crystal Hill	100	36	2	N	100	22	2
Camp Robinson	Camp Robinson base to Remount	60	34	2	N	60	34	2
Campbell Rd.	Faulkner Lake Rd. to Hwy. 165	60	36	2	N	60	20	2
Coll Street 4	Faulkner Lake Rd to Old Hwy 30	60	36	2	N	0	0	0
Colonel Maynard Rd.	Hwy 165 to Old Hwy 30	60	36	2	N	0	0	0
Crestwood	Randolph to N. Hills Blvd.	60	36	2	N	60	36	2
Crystal Hill	Hwy. 365 to I-40	70	36	3	N	60	24	2
Crystal Hill	Maumelle Blvd to Maumelle Blvd.	80	40	3	N	50	24	2
Curtis Sykes Dr	Main to I-40	80	36	3	N	60	24	2
Curtis Sykes Dr	I-40 to North Hills Blvd	80	36	2	N	60	24	2
Diamond Dr.	Harris to Hwy. 391	60	36	2	N	50	16	2
Donovan Briley	Remount to Camp Robinson	60	36	2	N	0	0	0
E 19th Street	Main to N. Hills Blvd.	60	36	2	N	60	22	2
E 19th Street Ext.	19th to 19th	60	36	2	N	60	22	2
E. 46th St	Smokey Ln. to Old Hwy. 67	60	36	2	N	50	24	2
E. 46th St	Jamison to Hadfield	60	36	2	N	50	24	2
E. 46th St. Ext.	46th to 46th	60	36	2	N	50	24	2
E. 46th St. Ext.	E. 46th St. to I-440	70	36	3	N	0	0	0
E. Bethany	Hwy. 161 to Eureka Garden	60	36	2	N	50	24	2
Eanes	E. 46th St to Harris	60	36	2	N	50	16	2
Eureka Garden Rd.	E. 46th to Hwy. 70	60	36	2	N	50	22	2
Fairway	McCain to Somers	60	40	4	N	60	40	4
Fairway	Lakeview to N. Hills Blvd.	60	36	2	N	60	36	2
Fairway	N. Hills Blvd. to McCain	60	36	4	N	60	36	2

Street Name	From-To	ROW Plan	Pave Plan	Lanes Plan	Bike Lane	ROW Exist	Pave Exist	Lanes Exist
Residential Collector								
Faulkner Lake Rd	I-440 to Bret Rd	80	36	2	Y	50	36	2
Faulkner Lake Rd	Bret Rd to Hwy 391	80	36	2	Y	50	22	2
Faulkner Lake Rd.	AR 391 to Walker's Corner	60	30	2	Y	50	20	2
Faulkner Lake Rd.	Campbell to I-440	60	36	2	Y	50	20	2
Idlewild Ave.	Cedar to Garland	60	28	2	N	60	28	2
Julian	W. 16th to Paul Duke	0	0	0	N	0	0	0
Kierre	Remount to Greenbank	70	36	2	N	60	36	2
Kierre	Greenbank to JFK Blvd	60	36	2	N	60	36	3
Lakeview	Barbara to Warden	60	44	3	Y	60	36	2
Lynch Dr.	Hwy. 70 to Campbell	60	36	2	Y	50	30	2
Military	Landski to McArthur	100	36	2	Y	100	24	2
Mission Rd.	Remount to Osage	60	30	2	N	60	20	2
North Hills	Osceola to JFK	60	40	2	N	60	40	2
Northbrook Dr	NB Interchange to W. Maryland	80	36	3	N	0	0	0
Osage Dr.	Mission to Seminole Tr.	60	36	2	N	60	36	2
Parkway	Division to Pike	60	36	3	N	60	24	2
Paul Duke Drive	River Road to Julian	60	27	2	N	0	0	0
Paul Eells Dr	Counts Massie to I-40	80	36	3	N	0	0	0
Percy Machin	W. Pershing to 18th	80	52	4	N	80	52	4
Pike Ave	33rd to 34th	60	44	4	N	50	24	2
Pike Ave	34th to Parkway	60	36	3	N	50	24	2
Pike Ave	Parkway to Foxboro	60	36	2	N	50	24	2
Poplar St	Riverfront Drive to SA Jones	60	36	2	N	60	27	2

Street Name	From-To	ROW Plan	Pave Plan	Lanes Plan	Bike Lane	ROW Exist	Pave Exist	Lanes Exist
Residential Collector								
Randolph	Hwy. 107 (JFK) to Crestwood	60	36	2	N	60	36	2
Ridge Rd	47th to 34th (D St.)	60	28	2	N	60	28	2
Rockwater	Riverfront to River Road	70	36	2	N	0	0	0
Seminole	Osage to NLR Limits	60	27	2	N	50	24	2
Somers	Fairway to Warden	60	36	2	N	60	36	2
Sycamore	W. 13th to W. 16th	60	28	2	N	60	28	2
W 18th Street	Crutcher to Percy Machin	60	36	2	N	60	30	2
W 33rd Street	Pike to W. 33rd Place	60	36	2	N	60	26	2
W. 10th Street	Pike to Crest	60	27	2	N	0	0	0
W. 10th Street	Crest to Paul Duke	70	36	2	N	0	0	0
W. 13th Street	Sycamore to Main	60	28	2	N	60	24	2
W. 16th Street	River Rd. to Sycamore	60	28	2	N	60	32	3
W. 19th Street	Willow to Main	60	36	2	N	60	27	2
W. 19th Street	18th to 19th	0	27	2	N	0	0	0
W. Pershing	First St. to Pike	80	52	4	N	80	52	4
Walkers Cnr Rd.	Hwy. 70 to Faulkner Lake Rd.	70	30	2	N	50	24	2
Walkers Cnr Rd.	Faulkner Lake Rd. to Hwy. 165	70	30	2	Y	50	24	2
Waterside Dr.	Garland to Avondale	60	27	2	N	60	27	2
Wayne	Hwy. 161 to E. 46th	60	30	2	N	60	22	2
West D Ave	W. 33rd Place to Cedar	60	27	2	N	60	27	2
Young Rd.	Cook's Landing-Crystal Hill Rd.	70	40	2	N	50	20	2
Young Rd. Ext.	Young Rd to Young Rd	70	40	2	N	0	0	0

Master Street Plan

- Roundabout
- Interstate-Freeway
- Principal Arterial
- Minor Arterial
- Collector
- Local
- Proposed Interstate-Freeway
- Proposed Minor Arterial
- Proposed Collector
- Proposed Principal Arterial

Community Planning

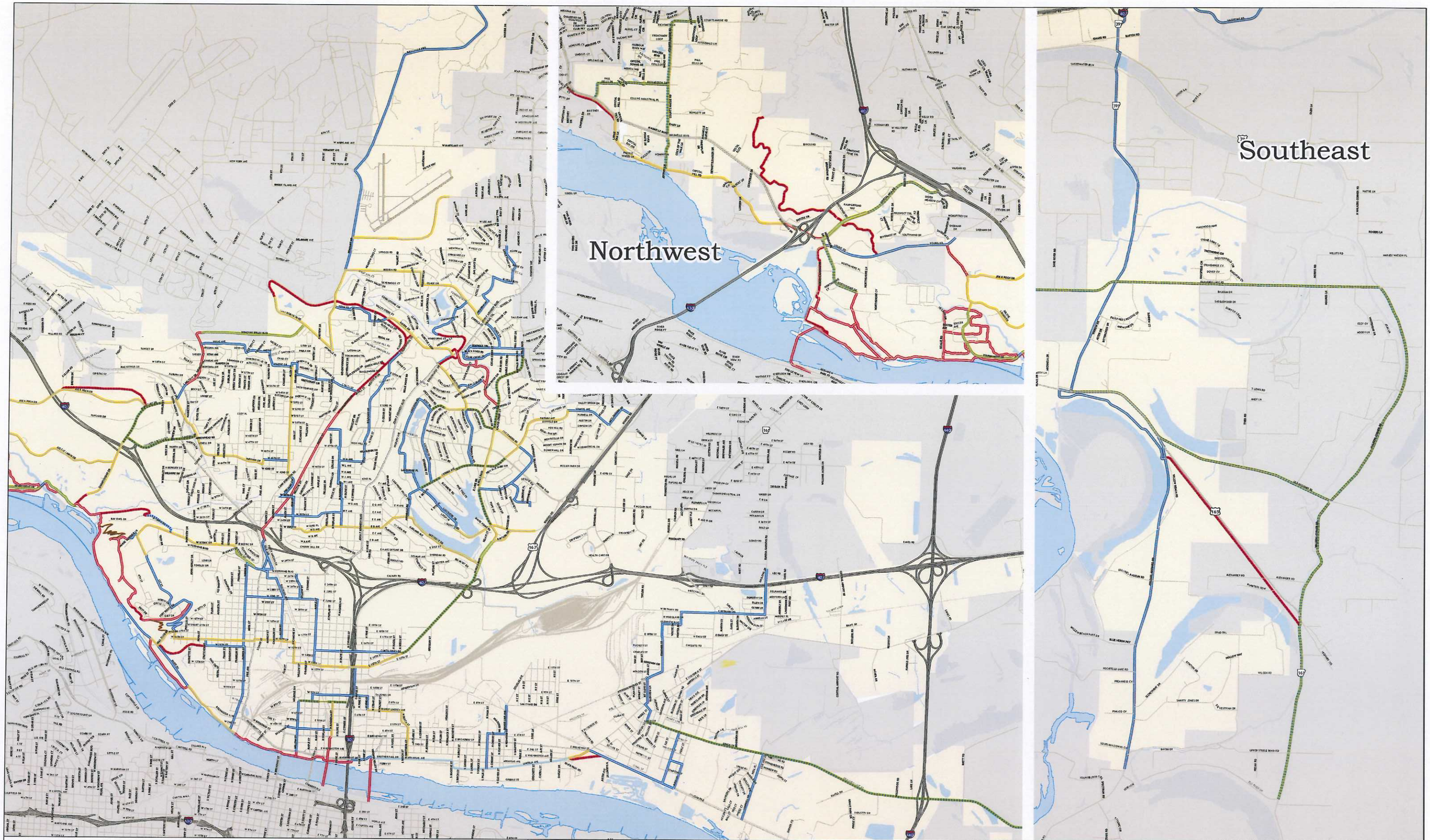
N

This map is the most up to date in the possession of the City of North Little Rock; however, please note that the areas depicted are not static. Daily changes may occur in the area depicted that are not reflected in the attached map. Accordingly, the City of North Little Rock does not warrant or guarantee that the map accurately reflects any and all recent changes.

Source: PAgis; U.S. Census Bureau; Geostor

0 1 2 Miles

Updated: 4/20/15



Bicycle Plan Map

3/28/2013

0 1 2 Miles

0 1 2 Kilometers

- Bike Path
- Proposed Bike Path
- Bike Lane
- Proposed Bike Lane
- Proposed Bike Lane on Future Facility
- Bike Route
- Bike Route w/Sharrow
- Bike Route w/Proposed Sharrow
- Proposed Bike Route
- Multi-Use Path (unpaved)
- Use Sidewalk
- Existing Sharrows, proposed to be moved

N

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