

Northwest Sector Study: Phase II

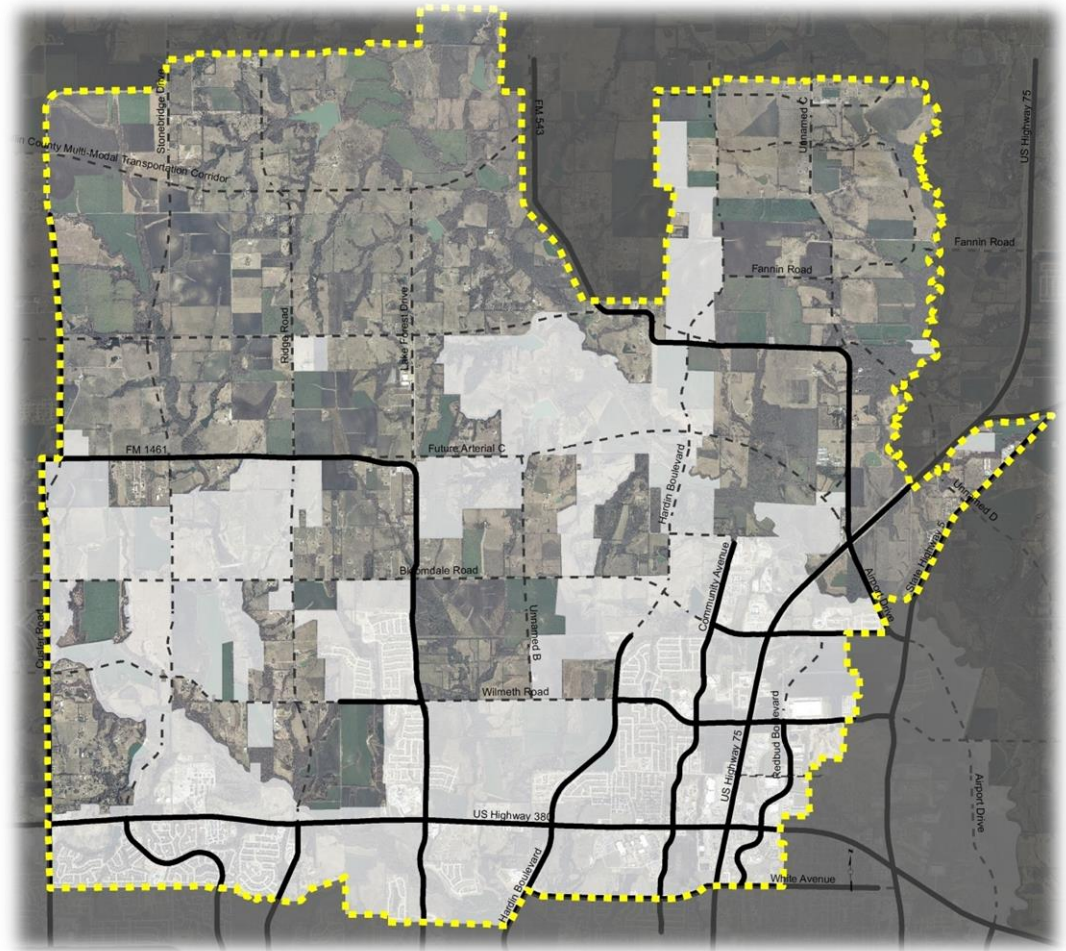
Northwest Sector Streets Policy
November 16, 2015



- MONEY MAGAZINE 2014 -

Where is the Northwest Sector?

- 30,000 +/- acres generally north of US 380 and west of US 75
- 42 percent lies within city limits; 58 percent lies within the Extra Territorial Jurisdiction (ETJ)

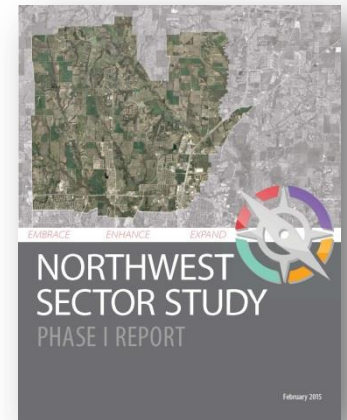


Northwest Sector Study Phase I Report

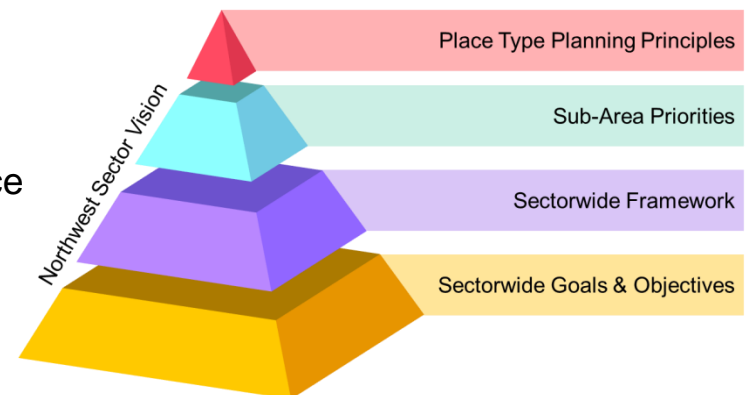
Created a vision for the Northwest Sector to guide the pattern of growth and desired development quality over the near, mid, and long term.

Key components of the vision:

- Balanced Tax Base
- Compatible Land Use / Mobility Relationships
- Quality Placemaking
- Embraced Natural Landscape
- Market Readiness and Adaptability
- Implementation
- Improved Residential-Commercial Interactions
- Improved Neighborhood Patterns
- Protection, Integration and Maximization of Open Space
- Improved Walkability and Connectivity
- Balanced and Purposeful Integration of Mixed Use
- Multimodal Connectivity



Approved February 17, 2015
(Resolution No. 2015-02-022 R)



Phase II Action Plan

Evaluate, craft, select, relate, and phase the appropriate implementation components into a comprehensive implementation program or Action Plan, including:

TASK 1. Market analysis and creation of locational criteria (*complete*)

TASK 2. Creation of a local street typology strategy/policy (*underway*)

TASK 3. Approach for orderly growth & annexation strategies (*underway*)

TASK 4. The analysis of and proposed amendments to development regulations in the Northwest Sector (*TBD*)

TASK 5. The creation of an infrastructure financing policy (*TBD*)

Why Create a Streets Policy?

The NWS Phase I Report outlines a number of recommendations related to transportation, mobility and streets:

1. Design transportation infrastructure that supports a compatible land use/mobility relationship.
2. More refined planning and management of the collector roadway network to ensure a well-connected series of collector roadways exists within the one-mile arterial grid.
3. Community-scaled roadways should be planned to maximize specific characters or amenities within the Northwest Sector.
4. Utilize sound street design principles.
5. Provide an effective/efficient transportation network.
6. Improve walkability within and between neighborhoods.

Current Street Design Manual

3.1 Functional Classification

Functional roadway classifications define the role of each type of thoroughfare and reflect a set of characteristics that are common to all roadways within each classification. This translates into physical design features concerning cross section, vertical and horizontal alignment standards, pavement width, access management, etc.

Access and mobility are the two functions considered when classifying a roadway. Mobility refers to the movement of traffic, both in terms of speed and capacity, and access refers to the accessibility of adjacent properties from the particular street. The two functions are inversely related; meaning that as access increases, mobility decreases. The hierarchy of streets with respect to their functional classification is listed below.

- **Principal Arterials** – high mobility, limited access
- **Minor Arterials** – moderate mobility, limited access
- **Collectors** – moderate mobility, moderate access
- **Local Streets** – limited mobility, high access

Figure 3-1 graphically depicts the relationship between the hierarchical functional classifications and the balance between access and mobility. Local streets provide the most access to adjacent properties, with reduced capacity and speed. Conversely, arterials have a limited number of intersections and curb cuts so traffic movements are not impeded, increasing mobility and limiting access.

Advantages of applying functional classification to design principals include preservation of residential neighborhoods, long term stability in land use patterns, value of commercial properties, fewer traffic accidents, and a decreased proportion of urban land devoted to streets. In areas developed in accordance with functional circulation concepts, approximately 20 percent of the urban land is devoted to streets, including arterials, while in a typical grid system, 30 percent or more is tied up in streets.

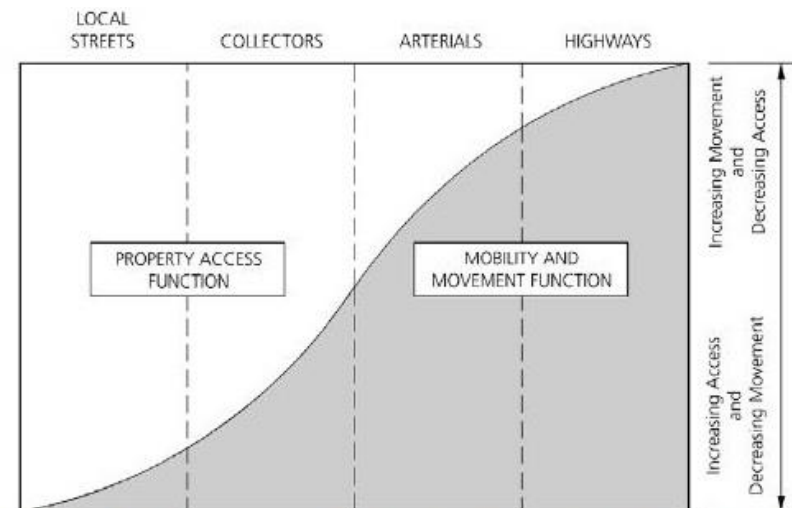
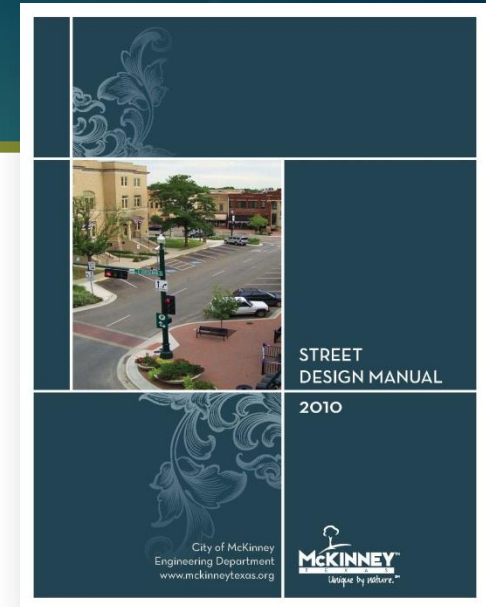
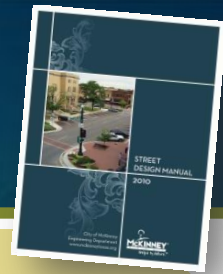


FIGURE 3-1 – FUNCTIONAL CLASSIFICATION OF STREETS

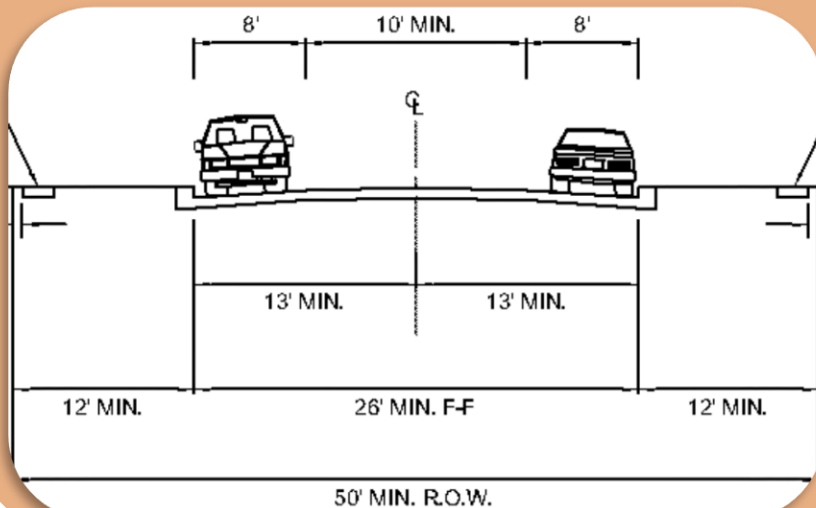
Street Design Manual:

Local and Collector Street Types



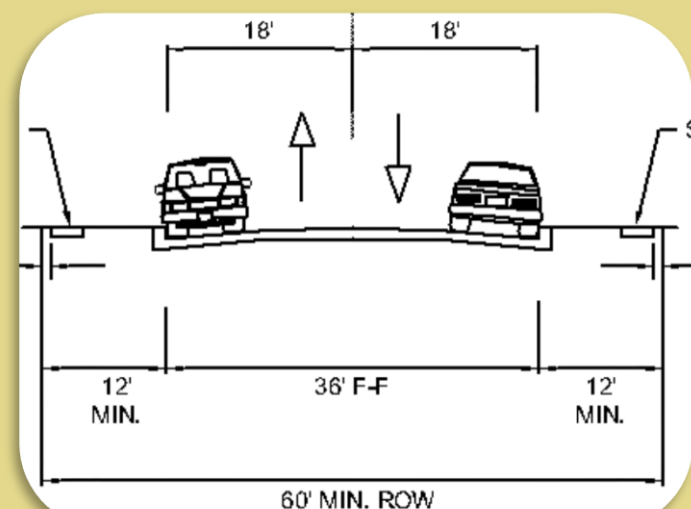
Local / Residential

- Purpose is to “provide access from groups of housing units within a neighborhood to collector streets.”
- 50' minimum ROW
- 8' parking on both sides
- Single lane of travel
- 26' curb face-to-curb face



Collector

- Purpose is to “collect and distribute traffic from local access streets and convey it to the arterial system.”
- 60' minimum ROW
- 8' parking on both sides
- 10' drive space both sides
- 36' curb face-to-curb face



Proposed Northwest Sector Streets Policy

*Central to the proposed policy is the recognition that local and collector streets should be differentiated by their purpose – **link** or **place**.*

The proposed policy outlines the following approach:

1. **Northwest Sector Street Network Criteria:** Establishes a clear set of priorities that should guide how collector and residential streets are planned, designed and constructed.
2. **Street Types:** Identifies a new set of local street types and states that standard cross sections should be established to allow necessary flexibility in their design so that they can achieve the goals of the street network criteria and be tailored to specific land uses and development patterns.
3. **Fundamental Connectivity Framework:** The function of streets (as link-focused or place-focused) and their relationships to each other within a neighborhood and to other areas should be fundamentally described for proposed development projects.

2. Street Types

Current Street Classifications

Classification	Street Type	Designation
Arterial Roadways	Principal Arterial	P6D
	Major Arterial	M6D
	Greenway Arterial	G4D
	Minor Arterial (divided)	M4D
	Minor Arterial (undivided)	M5U
	Minor Arterial (undivided)	M4U
	Minor Arterial / Frontage Roads	M3U
Local Streets	Collector	C2U
	Residential	R2U
Alleys	Residential Alley	RA

Recommended Street Classifications

Classification	Street Type	Designation
Arterial Roadways	Principal Arterial	P6D
	Major Arterial	M6D
	Greenway Arterial	G4D
	Minor Arterial (divided)	M4D
	Minor Arterial (undivided)	M5U
	Minor Arterial (undivided)	M4U
	Minor Arterial / Frontage Roads	M3U
Neighborhood Streets	Neighborhood Link (Major)	NL4
	Neighborhood Link (Minor)	NL2
	Neighborhood Place	NP
Local Streets	Local Link	LL
	Local Place	LP
	Rural/Estate	RE
Alleys	Residential Alleys	RA

2. Street Types

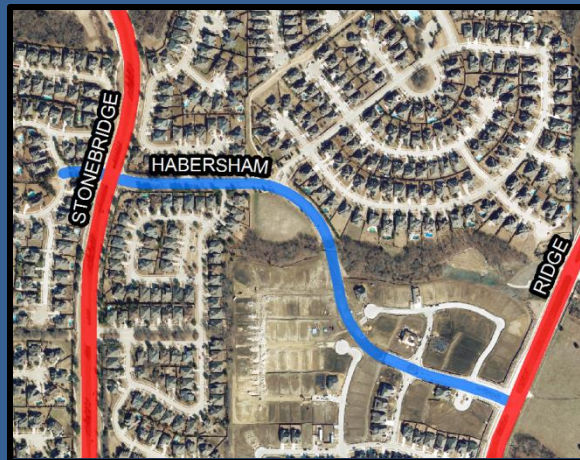
Neighborhood Streets

Neighborhood Link (Major)



- 4 Lanes
- Median allowed
- No on-street parking
- Used to connect arterials within one or between multiple areas
- Similar to City's M4U and M4D arterial roadway (Glen Oaks Drive)

Neighborhood Link (Minor)



- 2 Lanes
- Median allowed
- No on-street parking
- Used to connect arterials within one or between multiple areas
- Habersham Way between Stonebridge Drive and Ridge Road

Neighborhood Place



- 2 Lanes
- On-street parking in designated spaces
- Used to anchor mixed-use centers
- Similar to Mediterranean Drive in Adriatica

2. Street Types

Local Streets

Local Link



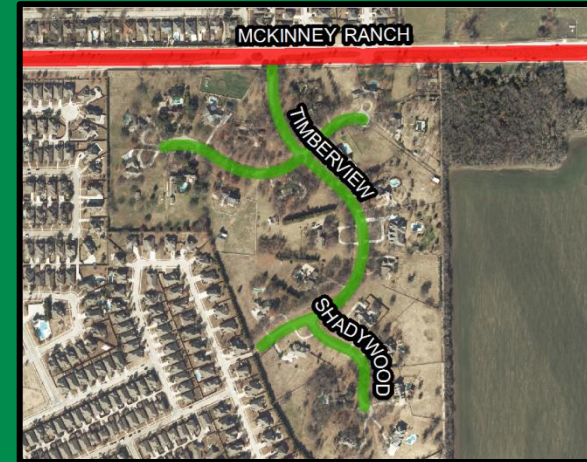
- 2 Lanes
- On-street parking in designated spaces
- Access within a neighborhood to community destinations (schools, churches, etc.)
- Wolford Street, Dowell Street and Carlisle Street between Virginia Pkwy & Bois D'Arc Rd

Local Place



- 2 Way Yield
- On-street parking allowed
- Best used as a typical residential street
- Most residential streets currently in McKinney meet this description

Local Rural / Estate

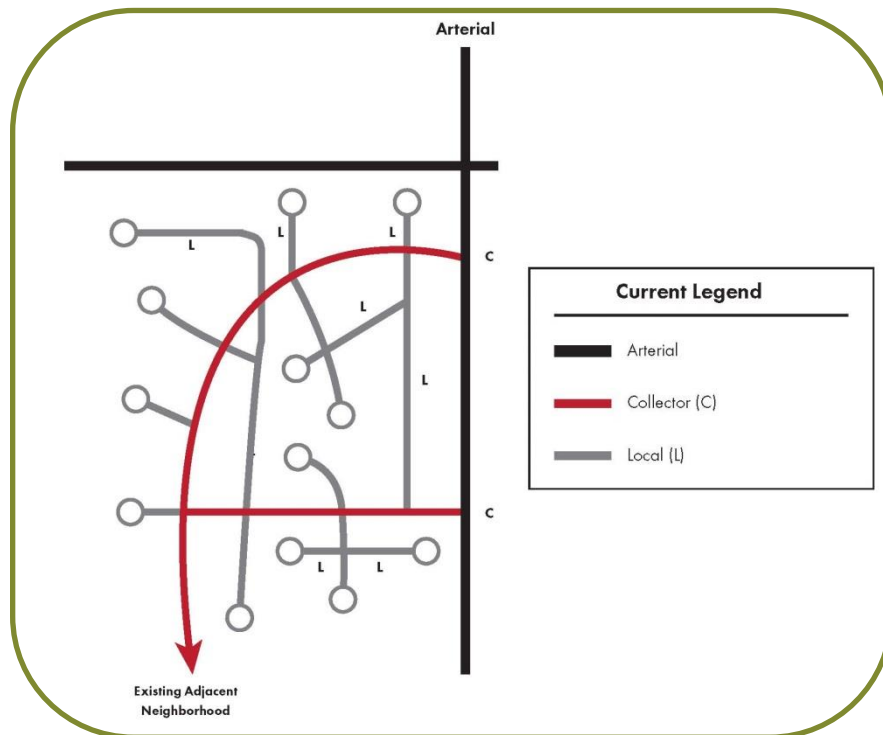


- 2 Way Yield
- On-street parking allowed
- Used to create a rural or 'less-developed' sense of place for a residential neighborhood
- Similar to Timberview, Meadow Hill and Shadywood south of McKinney Ranch Parkway

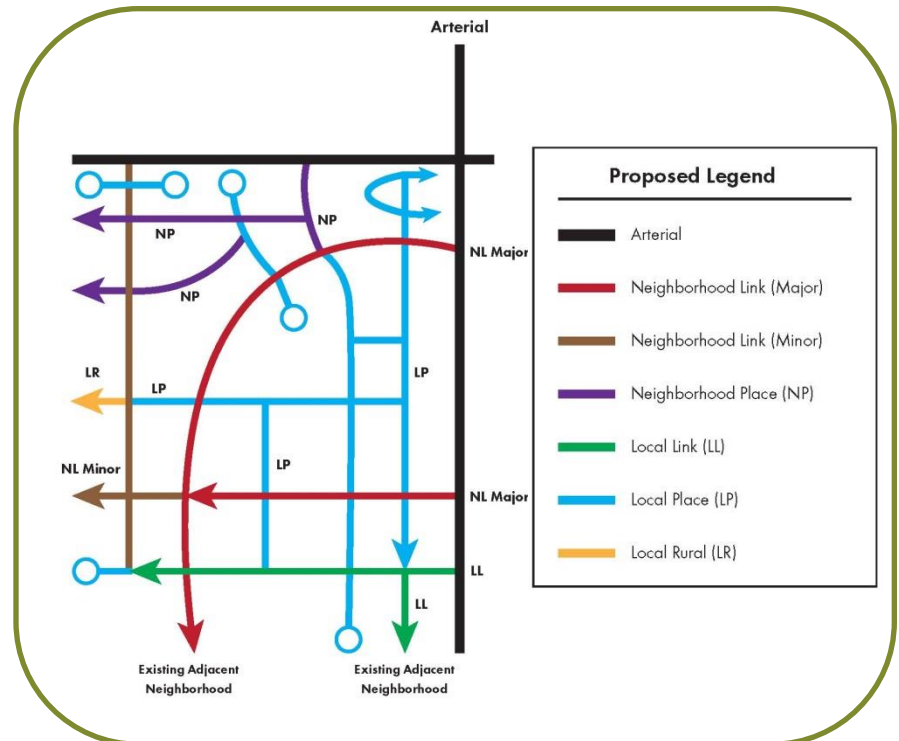
3. Fundamental Connectivity Framework

Establish a development review process that accounts for the street network as it relates to the context of a particular development.

Under Status Quo



Under Proposed Policy



Limitations vs Solutions

Limitations of the Current System

Does not inherently promote connectivity between neighborhoods; ad hoc development of roadways



Solutions Created by Streets Policy

Connectivity Plan that designates roadway types and connections

Only two cross sections essentially creates a 'one size fits all' situation



Wider range of options from which to choose

Any requested variance results in a negotiation process



Greater predictability combined with flexibility given by a range of options

Potential Implications

New system of thought on roadways – may take time to implement

Some requirements have potential for higher costs (City & Developer)

More nuanced design required at an earlier stage of development

Next Steps

Winter 2015

- Present proposed Northwest Sector Streets Policy to the Development Advocacy Group of MEDC
- Present proposed Northwest Sector Streets Policy to City Council for potential action

Spring 2015

- If adopted, begin revision process to the Street Design Manual and other relevant regulations.

In light of the ongoing efforts with the ONE McKinney 2040 Comprehensive Plan Update, Staff will be coordinating with the consultant team to discuss the remaining Northwest Sector Phase II tasks (regulatory review and infrastructure financing policy), their timing, and the potential for maximizing those tasks and the remaining professional services related to Phase II of the Northwest Sector.