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Abstract

Omaha, Nevada's Master Plan includes a Transportation Element which outlines a future bicycle network through Omaha. The purpose of the network is to provide a bicycle facility (bike-oriented path) to all mixed-use centers in Omaha. The facilities were chosen based on traffic volume of the proposed route, distance between centers, and topography of the area. These facilities allow for safe passage and recreational activity.

Bicycle facilities have three classifications: trails, paths, and routes. Bicycle trails give people a facility exclusive to bicycles, constructed of an all-weather surface at 8-10 feet wide. Bicycle paths are facilities located next to minor and major roads on only one side of the road and must be 10-feet wide. Bicycle routes are streets which allow bicycles but does not include a separate facility for bicycles.

As more facilities are built, paths and trails will begin to replace existing routes. Facilities adjacent to roads will be constructed as roads are being improved. While roads are being improved and paths constructed, temporary 4-foot wide sidewalks will be provided on both sides of the corridor.

Resources

Bicycles

Map 5-Future Bicycle Facility Map in Appendix A shows the future bicycle network in Omaha. The intent is to provide a safe route via bicycle to all the mixed-use centers in Omaha. The routes were chosen based on traffic volume, directness between centers, and topography. Bicycle facilities located adjacent to these streets will be constructed as the roads are improved. In the meantime, four-foot sidewalks will be provided on both sides of the street.

[Type text]

Bicycle Facilities

1. There are three classifications of bicycle facilities:(see Map 5-Future Bicycle Facility Map in Appendix A)

Bicycle trail: An exclusive bicycle facility with cross traffic minimized. Bike trails shall be constructed of asphalt, concrete, or other all-weather surface. Bicycle trails shall be a minimum of eight feet wide, ten feet preferred.

Bicycle path: A separate bicycle facility located next to minor and major arterials. Bike paths shall be located on one side of these streets and shall be ten feet wide.

Bicycle route: A street that is signed as a bicycle route, but which does not include a separate facility for bicycles. These are normally located on local roads.

2. Bicycle-friendly drainage grates are required along all streets.

3. The priorities for the replacement of grates will be given to those streets designated as bicycle routes.

4. Improvements allowing safe passage for bicyclists will be incorporated into maintenance and construction work on all streets and bridges.

5. Bicycle routes on local streets will be replaced by bicycle paths and trails as more of these facilities are built.

6. The following criteria should be used for trail construction unless there is compelling evidence to deviate from these guidelines. The ten foot trail is to be constructed within a 40-foot corridor and the corridor must be:

- a. outside of the proposed Papio Missouri River NRDs channel improvement and maintenance easement, and
- b. outside of the 3:1 plus 20 foot erosion easement, and
- c. above the flood elevation set by FEMA for a ten-year flood, and
- d. outside the floodway.

Omaha, Nevada's Transportation Element can be found here:

<https://planning.cityofomaha.org/images/stories/Urban%20Planning/Master%20Plan/Elements/Transportation%20Element.pdf>

Omaha Master Plan
Mike Fahey, Mayor Report #276

Transportation **Element**



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Introduction

By their very nature as centers of commerce and industry, cities exist because of their proximity to transportation corridors. Access to major roadways, rail lines and other transportation routes often determines the economic viability of a community and controls the pattern of its growth.

A city's form is directly related to its circulation systems. Transportation corridors influence basic land use patterns by controlling the movement of goods and people and in turn, the location of industries, commercial centers and residential developments. At the same time, the modes of transportation available to a community's residents determine the overall density of the community and the extent of its development.

Omaha's emergence as a major metropolitan area is a prime example of the effect of transportation on the development of a city. The community's original location, a plateau overlooking the Missouri River, was not merely selected because it provided protection from the shifting flows of the river, but also because of its location at the convergence of major early transportation routes. The fact that these routes crossed in the vicinity of the future location of Omaha was important to the early success of the community.



The Summit

That success was ensured by another transportation related decision -- the creation of the transcontinental railroad. As the headquarters for the construction of the Union Pacific Railroad, Omaha's dominance in the region was solidified and the city began to flourish.

Omaha's initial urban form evolved from the location of businesses and industries in relation to the railroad and river. Because river boats, railroads, horses and walking were the main modes of transportation at the time, the city's early land use pattern was, by necessity, relatively dense. Industries which relied on railroads and river boats for the movement of goods and supplies located close to their terminals. Commercial establishments and offices which could be supplied by horse-drawn wagons were located a short distance away and residents who traveled primarily on foot lived in housing immediately surrounding the downtown. Only wealthier individuals who traveled by horse and carriage were able to live outside the center of town.

Omaha's land use pattern began to change dramatically in the 1880s with the advent of another new form of transportation, the electric streetcar. The city, which had grown into a substantial community by the time the streetcar was introduced, had established an extensive network of streets radiating steadily outward from the original center of the city. However, Omaha's density remained quite high since workers still traveled on foot.



Omaha Railyards

With the advent of local transportation, residents were able to live further from their jobs, thereby encouraging lower density housing. Early developers capitalized on the opportunities afforded by this new form of transportation by building housing further from the city's center. In fact, most of the original street car lines were owned by developers who used them to attract buyers. As a result, the city began to spread out and small communities developed at the ends of the streetcar lines. Omaha had begun to experience suburban development.

By the early 1900s the automobile had become a common sight on the city's streets and with it came another major change. Residents were no longer tied to the streetcar system as their only form of rapid transportation and businesses were able to use trucks to deliver supplies rather than depending on the railroads. These factors, together with a propensity toward lower density housing and the space intensive nature of the auto, combined to further reduce the density of the city. Once again, land use patterns shifted as residents and businesses took advantage of this new form of transportation.

As dependence on the automobile grew, auto-related commercial strips began to appear. However, the basic form of the city remained somewhat similar until the end of World War II. Following the war, the nation recognized the need for a system of highways which would provide for more rapid inter-city travel and, at the same time, aid in the nation's defense. Soon thereafter work began on a network of interstate highways designed to link the country. Omaha was selected as one of the cities along the proposed interstate system and land use patterns

began to change again following the construction of Interstate 80 in the 1960s.

The new interstate system now allowed Downtown workers to live in the far western part of the city and commute daily to Downtown. Truck transportation enabled industries to spread out further and commercial centers began to develop at the intersections of major roadways. Auto-related commercial development continued to increase and for the first time office buildings began to locate outside of Downtown.



84th Street South

Also, after World War II, the nation’s road configuration shifted from the grid system to a hierarchical system made up of arterials, collectors and local roads. As a result, development patterns dramatically changed (See Figure 1). Although the grid system and hierarchical system are not mutually exclusive and in fact co-exist in Omaha, the hierarchical system did encourage a more curvilinear, non-contiguous street pattern.

Coincidental with the change in street pattern, other trends related to consumer preferences, transportation options, government policies, and development financing and construction techniques worked together to encourage lower density development. As a result, cities became less dense, land uses became rigidly separated, and the cul-de-sac emerged as the preferred type of residential street.

This Transportation Plan will address the problems of increased traffic congestion and dependence on the automobile. It will create a new transportation system that will incorporate the needs of pedestrians, bicyclists, and transit users while continuing to accommodate the auto. It will also call for a more efficient street layout and reduce constraints on mass transit in developing areas.

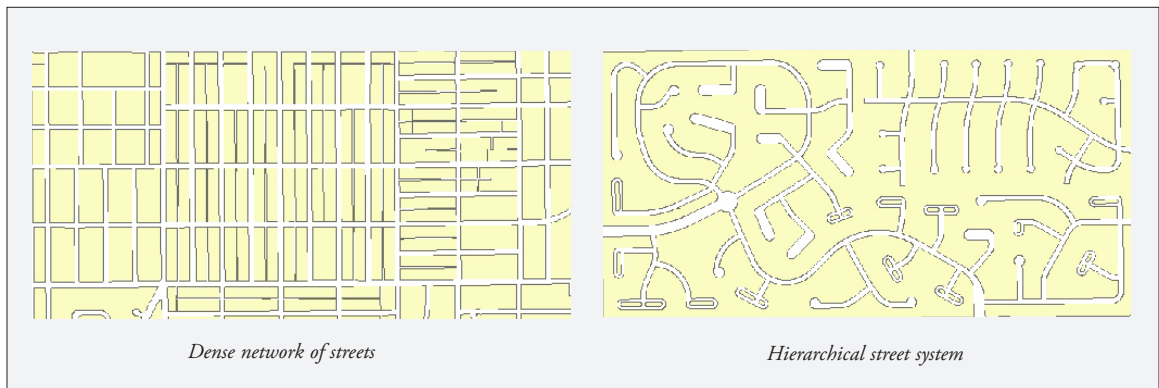


Figure 1

Vision and Goals from the Concept Element

This Transportation Element is meant to further address the specific transportation goals that the City Council approved in the Concept Element. The transportation-related vision and goals from the Concept Element are as follows:

Vision

Omaha must be a community committed to promoting and maintaining a high quality of life for all of its people.

- Omaha's urban form must be carefully designed to eliminate land use conflicts, reduce traffic congestion, encourage pedestrian movement, and incorporate open space.
- Public improvements and services must be provided in a way which promotes balanced growth and redevelopment and distributes costs according to benefits received. Quality, efficiency, and equitable distribution need to be stressed in the provision of public facilities and services. In an effort to improve Omaha's overall quality of life, fiscal, social and environmental costs and benefits must be considered in decisions regarding public services.



Old Market

Goals

Manage the growth of the city.

- Be pro-active rather than reactive regarding development.
- Establish a contiguous and compact pattern of growth.
- Prevent new strip office/commercial development.
- Create a series of high-density, mixed-use areas through the city.
- Emphasize people not automobiles in the design of streetscapes.
- Reduce sign redundancy and clutter.

Provide public services efficiently and equitably.

- Ensure that those who benefit help pay for the city services they receive.
- Link transportation and land use planning and match street sizes to surrounding land use.
- Reduce traffic congestion and costs by shifting from a "sparse hierarchy" to a more balanced transportation pattern with more emphasis on a "dense network" street system.



One Pacific Place

Current Conditions and Trends

Between 1960 and 1990 Omaha's population grew 11%, households increased 44% and the area of the city doubled. Although the city's population increased, population density decreased from 5,933 to 3,260 persons per square mile between 1960 and 1990 (See Figure 2). This is the result of the emergence of the automobile as the chief form of transportation, which can be clearly seen when comparing numbers of licensed passenger vehicles to the population in 1960 and 1990 (See Figure 3). The ratio of passenger vehicles to people doubled in that 30-year span. In other words, one car per family was the norm in 1960, and in 1990 it is two cars per family.

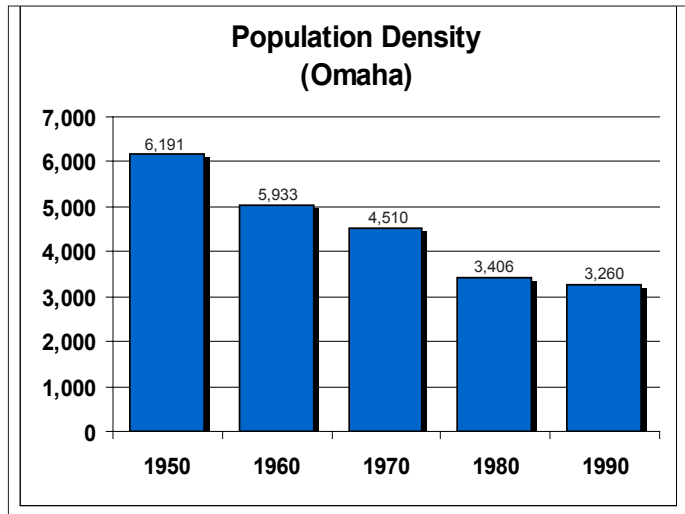


Figure 2

Recent information produced by the Metropolitan Area Planning Agency (MAPA) provides important insights concerning current traffic flows within the city and surrounding communities. According to the most recent MAPA figures, in 1994 the Omaha metropolitan area experienced over 11,382,000 Vehicle Miles of Travel (VMT) per day. Of that total, 8,503,105 VMT per day or 74.7% took place within Omaha and its jurisdiction (See the 1994 Traffic Flow Map in Appendix B). The 1980-1994 data also shows significant increases in travel in the suburban areas of West Omaha, particularly on West Maple Road west of 120th, on West Dodge Road west of 144th, and West Center Road west of I-680 (See Percent Change in Vehicle Miles Map in Appendix B).

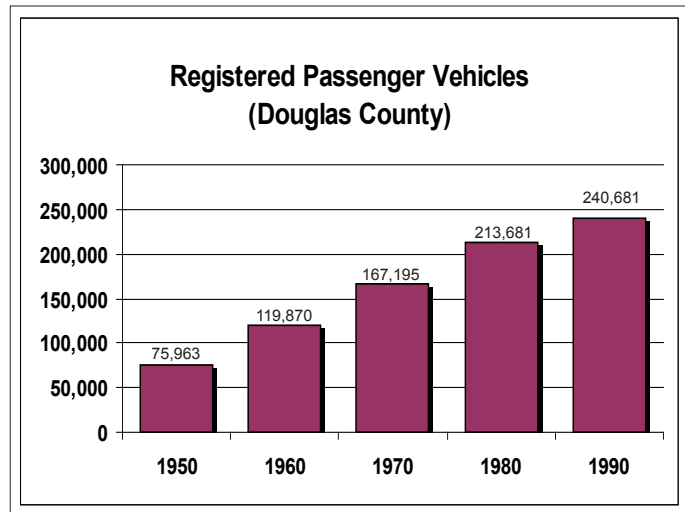


Figure 3

Deficiencies of Services on Roads

Roads are measured based on their Level Of Service (LOS), which is based on a scale from A to F. LOS A represents free-flow traffic, like driving the interstate at midnight. LOS E represents congested conditions, such as waiting through several traffic signal cycles before being able to move through an intersection. LOS F is complete gridlock (See Figure 4). To determine this, transportation engineers study the capacity each road is designed to handle and compare it to the actual traffic counts on the road. If the counts are equal to the design capacity, then the Level of Service is C. However, because of the vast expense of building to LOS C, LOS D is commonly used as the “accepted” level.

MAPA has determined which roads in the Omaha network are currently overloaded, and those where traffic flows freely (See Existing Areas of Congestion-1994 Map in Appendix B).

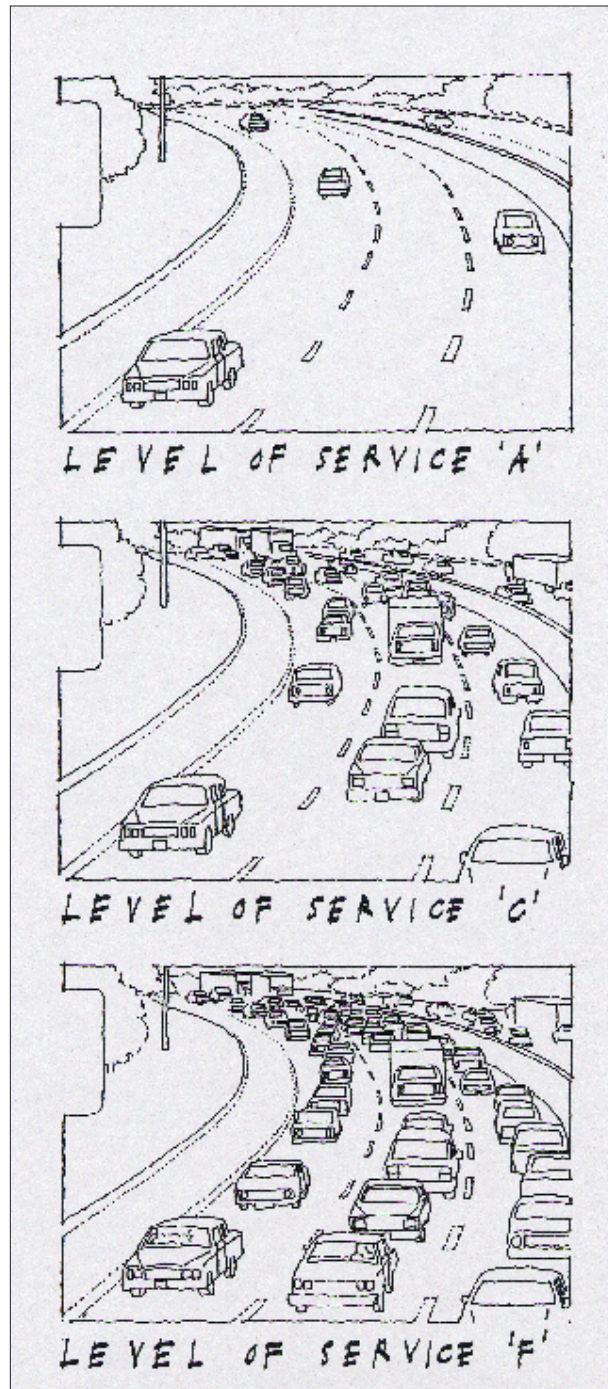


Figure 4

Long Range Transportation Network

The Concept Element states:

Throughout the city and its jurisdiction, Omaha will continue to require adequate streets which promote transportation efficiency, reduce congestion, and limit access points.

The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) requires each Metropolitan Planning Organization (MPO) to develop a long range Transportation Plan. In the Omaha metropolitan area MAPA serves as the MPO. MAPA completed the plan for Federal review with the assistance of the City of Omaha.

The Transportation Plan process results are twofold: a map showing the projected street improvements for the next 20 years, and a map showing the ultimate R-O-W widths which will be necessary much further into the future.

GUIDELINES

Level of Service D

To create the projected 20-year future network, called the Year 2020 Interim Transportation Plan, MAPA used future growth projections (population, housing, commercial areas, etc.) and traffic modeling techniques to predict road improvements necessary to accommodate this growth and keep the street network at LOS D (See Map 1-Year 2020 Network in Appendix A).

In many cases, street widening can lead to decreased setbacks, negative impacts on historic structures, and damage to the neighborhoods. Therefore, while the goal is to maintain LOS D, it is understood that in some cases this is not feasible due to physical constraints and the greater desire to protect surrounding neighborhoods. Examples of this are the decision not to widen Underwood Avenue and 84th Street between Center Street and Pacific. However, adding turn lanes to specific approaches at individual intersections may also be appropriate and not result in significant land use impacts.

1. Level of Service D should be maintained at signalized intersections during the a.m. and p.m. peak hours.
2. Street designs should allow for stable traffic flows and acceptable delays during periods of peak flow and higher levels of service during off-peak hours.
3. Major streets included within proposed projects should be designed to provide a LOS D for a 20-year time frame or at full development. New projects should also set aside adequate R-O-W for the eventual widening of adjacent major streets.



Dodge East 114th Street

Ultimate Right of Way

This 2020 Transportation Plan will be used as a tool to determine how much money will be needed for street improvements over the next several years, how much R-O-W should be dedicated to accommodate these improvements, and what type of land use will be allowed so as not to overflow the proposed network.

The year 2020 map was used as a starting point and expanded into the future. The purpose behind this map is to ensure that the needed R-O-W will be available far into the future to accommodate needed road improvements beyond the year 2020. R-O-W is a costly aspect of street construction, so this map will determine where land should be reserved, even though the improvements will not be made in the near future (See Map 2 -Ultimate R-O-W in Appendix A).

1. The Ultimate R-O-W map will be used as a reference point when determining additional R-O-W for future developments.



72nd Street



72nd Street

Street Design

The Concept Element states:

- The City will promote street systems, such as "dense street networks", that offer flexibility, provide for better traffic flow, and reduce street right-of-way and paving costs.
- The City will develop flexible design standards for street sizes based on surrounding land use patterns and densities.
- Traffic calming techniques on local residential streets, in both existing neighborhoods and new developments, shall be provided when appropriate, to attain a better balance between street users including pedestrians, bicyclists, transit, and autos. Such traffic calming efforts will support the tenets of the Master Plan.

Since 1950, there has been an increasing orientation towards auto-dependent development patterns in Omaha. By 1960, Omaha's street pattern consisted predominantly of "dense networks". At that time, 17% of the city's land use was used for street right-of-way. In older areas of the city, access was possible via any number of routes. By 1985 however, the newer areas of the city were developed on a "sparse hierarchy" pattern of expressways, major and minor arterials, collectors, and local streets. Local streets were designed to provide access for local traffic, not for access through an area, and they often ended in cul-de-sacs. Because the major streets provided the only through access, they had to be much wider to accommodate larger volumes of traffic. Land used for street right-of-way had risen to 21% of the city's total land area by 1985.

Experience has shown that additional right-of-way - more streets and wider streets - does not provide a long term solution to traffic congestion. In fact, a network of small interconnected streets has more capacity than the same street area arranged in a sparse hierarchy of large streets (See Figure 5).

The intent of the dense street network is to provide alternatives to the arterial street system, and therefore, reduce the pressure to widen all the arterial streets to four and six lanes (See Figure 6). The dense street network embraces traffic calming devices, such as narrower pavement and offset intersections (See Figure 7). The dense street network has lower travel speeds but comparable travel time to the sparse hierarchy. This is due to the geometry of the dense network of streets, which minimizes the travel distance for any given pair of origins and destinations.



I-680 at Pacific

GUIDELINES

Street Classification System

In order to develop design standards for street sizes based on surrounding land use patterns and densities, the Transportation Plan addresses street classification (See Map 3-Road Classifications in Appendix A and Figure 8), land use classification and their ties to each other, as well as standard street cross-sections for new construction.

Below are proposed street definitions and cross-sections, attached to abutting land uses. Existing streets will not be widened solely based on these new cross-sections and every effort will be made to reduce or eliminate adverse travel-related impacts on residential neighborhoods.

Land Use Classifications are listed for reference purposes. For further detail on the Land Use Classifications, refer to the Land Use Element.

1. Interstate

DEFINITION

The Federally Designated National System of Interstate and Defense Highways. These highways are characterized by high speed movement of both regional and national traffic. The interstate provides access to street systems through limited connections with major streets, provides no direct connection to abutting uses. Volumes are normally in excess of 50,000 vehicles per day and often over 100,000 vehicles per day.

LAND USE

While no land uses are afforded direct access to the interstate, industrial uses and highway commercial uses are more prone to be located at interstate interchanges.

DESIGN SPEED

Determined by the Nebraska Department of Roads.

CROSS-SECTION

Determined by the Federal Highway Administration. High speed, divided highway with controlled access, grade separated interchanges, number of lanes related to traffic volumes four lanes considered a minimum.

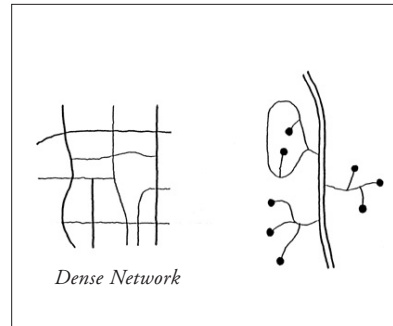


Figure 5

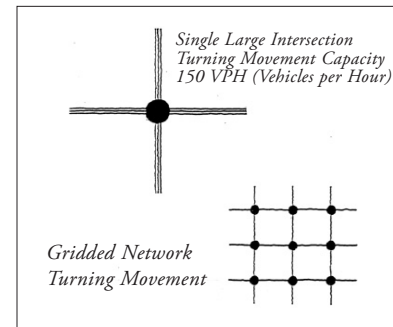


Figure 6

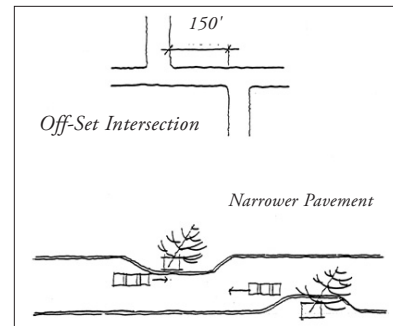


Figure 7

2. Expressway

DEFINITION

A divided arterial highway for through traffic with full or partial control of access which may have grade separations at intersections.

LAND USE

No access directly to properties, however, office/commercial and high-density residential tend to locate along expressways/freeways.

DESIGN SPEED

Determined by the Nebraska Department of Roads (NDOR) and City of Omaha.

CROSS-SECTION

High speed, divided highway with controlled access, grade separated interchanges normally used, number of lanes directly related to traffic volumes with four- and six-lane freeways dominant.

3. Major Arterial

DEFINITION

A major street that serves as an avenue for the circulation around, into and out of the city. A major arterial should emphasize mobility and provide only limited access to abutting properties. Volumes on major arterial streets normally range between 15,000 to 35,000 trips per day.

LAND USE

Medium/high-density residential
Commercial/office
Institutional/public
Industrial
Neighborhood mixed-use center
Community mixed-use center
Metro mixed-use
CBD

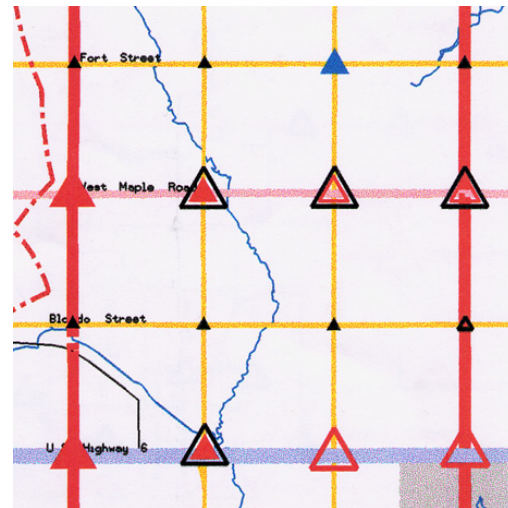
DESIGN SPEED

Determined by NDOR or the City of Omaha.

CROSS-SECTION

A major arterial can be as much as 6 lanes wide with a center median, but preferably 4 lanes wide with a center median. Generally R-O-W, between 100 and 200 feet (See Map 2-Ultimate Right-of-Way Map in Appendix A).

To offset the impact of a six-lane facility and to meet the bicycle/pedestrian guidelines called for in the Concept Element, some major arterials will be built as parkways, allowing for extra landscaping and bicycle/pedestrian amenities. The parkway designation does not alter the major arterial classification. 144th Street is an example of a parkway.



Street sizes, ranging from interstate to collector, are matched with mixed-use areas ranging in size from metro to convenience

Figure 8

4. *Minor Arterial*

DEFINITION

A major street that serves as an avenue for the circulation around, into and out of the city. A minor arterial provides more mobility than access to abutting properties. Volumes on minor arterial streets normally range between 5,000 to 15,000 trips per day.

LAND USE

Medium/high-density residential
Commercial/office
Institutional/public
Industrial
Convenience areas
Neighborhood mixed-use center
Community mixed-use center

DESIGN SPEED

Determined by the City of Omaha.

CROSS-SECTION

Minor arterials can be as wide as four lanes with a median but may be as narrow as two lanes. The width of the R-O-W is generally 100 feet (See Map 2-Ultimate Right-of-Way in Appendix A).

5. *Collector*

DEFINITION

A street whose principle function is to carry traffic between minor, local, and subcollector streets and arterials but that may also provide direct access to abutting properties. Collectors should provide equal access and mobility. Volumes on a collector street normally range between 2,000 and 5,000 trips per day.

LAND USE

Medium and high-density residential
Institutional/Public
Convenience areas
Small industrial areas

DESIGN SPEED

Determined by the City of Omaha.

CROSS-SECTION

Street design standards are set forth in Chapter 53 of the Omaha Municipal Code.

6. *Local*

DEFINITION

A street whose sole function is to provide access to abutting properties.

LAND USE

Residential
Parks and open space

DESIGN SPEED

Determined by the City of Omaha.

CROSS-SECTION

Street design standards are set forth in Chapter 53 of the Omaha Municipal Code. Local residential streets may incorporate appropriate traffic calming techniques in their street designs in accordance with guidelines established in the City of Omaha's Traffic Calming Program.

Driveways

1. A single parcel or contiguous parcels comprising one development located on collectors or above should be limited to one driveway, unless traffic volume or street frontage warrant additional driveways.
2. On major arterial and minor arterial streets, driveways should be shared between adjacent properties and common ingress/egress easements whenever physically or legally possible. Existing driveways that are safety hazards, reduce capacity, or are substandard should be removed or upgraded in conjunction with any new on-site or street construction.
3. There will be no driveways in the first 500 feet from the intersection of two arterials on lots in new developments. A minimum distance of 660 feet is preferred (See Figure 9). This standard is also to be applied to the redevelopment of existing lots whenever physically or legally possible.
4. On major arterial and minor arterial streets, large developments should consolidate major driveways and align them with driveways on the opposite side of the street. The location of these driveways will be coordinated to conform with future medians (See Figure 10-Arterial Access Implementation Policy).
5. Direct access onto arterials is prohibited for single-family lots. Direct access onto collectors will be allowed in new developments only if necessary due to physical constraints.
6. One-way loop streets should be considered off of collector roads as an alternative to cul-de-sacs.
7. Driveways to residential corner lots should be located as far away from the intersection as is possible. Only one driveway will be allowed for each corner lot if the lot is located at the intersection of a local and a collector street, the driveway should be accessed from the local street.

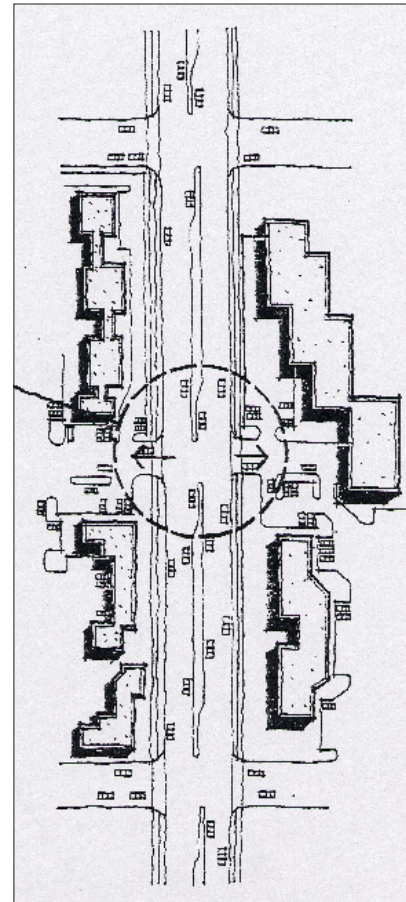
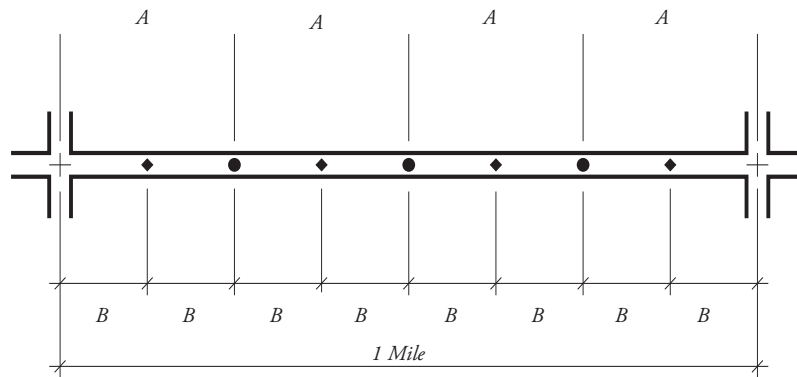


Figure 9

Arterial Access Implementation Policy

The following criteria have been adopted by the public works and planning department. The purpose is to set standards for access points along major and minor arterial streets within the jurisdiction of the City of Omaha. This policy supports the master plan's call for a dense network of streets as well as provides for safe and efficient arterials throughout the community.



- Point of intersection for through streets; median break
- ◆ Right-in, right-out only (design per Fig. 4, page 7, Traffic Engineering Division Guidelines as shown below); not allowed in single family areas; no signalization; deceleration lane required at private cost for private drive; deceleration lane may be general obligation debt if for public street; conditions of access to be recorded on plat

- A 1320' spacing preferred
1200' minimum spacing
- B 660' spacing preferred
500' minimum spacing

NOTE:
Intersections at mixed-use center locations to be designed according to traffic impact study requirements

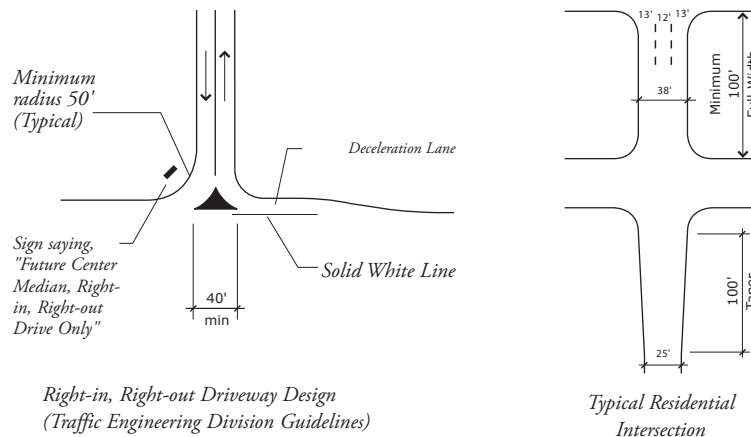


Figure 10

Medians

1. Raised medians are desired for major arterials larger than three lanes.
2. Median breaks on arterials will only be permitted at the 1/4, 1/2, and 3/4 mile points, or as close to those points as sight distance will allow (See Figure 9).
3. Where medians are not provided on arterial streets, refuge islands should be provided for pedestrians (See Figure 11).
4. Medians on arterial streets should be at least 16 feet wide to support landscaping and refuge islands.



Pedestrian Refuge Island

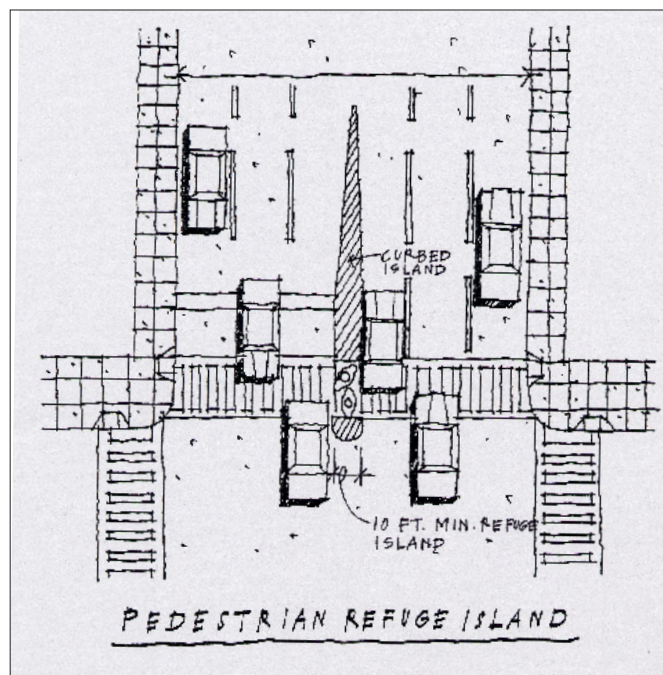


Figure 11

Traffic Signals

1. Coordinated traffic signals to optimize traffic progression on a given route are desirable for major arterials and minor arterials.
2. Traffic signals may be located at the intersection of two arterials, as well as the intersections of collectors and arterials, as close to the 1/4, 1/2, and 3/4 mile points for points as possible (See Figure 9).
3. Actuated traffic signals should include push buttons for pedestrians to cross. Actuated traffic signals corresponding with bicycle paths should include bicycle sensitive loop detectors.

Intersections

1. Intersections should be spaced consistently with the arterial access policy (See Figure 10).
2. Intersection access points along State highways are determined by NDOR (See Controlled Access Map in Appendix B).
3. Intersections of major arterials, minor arterials and collectors should not be offset. Residential subcollector and local intersections may be offset within the mile-to-mile section to discourage cut-through traffic in subdivisions providing they meet minimum traffic safety standards (See Figure 12).
4. Intersections may be expanded to include additional turning and through lanes to relieve congestion and improve intersection operation, so long as the intersection will accommodate pedestrians and bicyclists. The design of traffic system improvements, which facilitate vehicular turning and bus movements, should not discourage pedestrian or bicycle movements.
5. When provided, bus pull-off bays should be located at the far end of an intersection. Construction of new bus pull-off bays should be located at the far end of intersections. However, if no bus pull-off exits, MAT's fixed route and express service stops are and will continue to be located at the near side of an intersection (See Figure 13).
6. Pedestrian crosswalks should be provided at the intersections of arterials and collectors. The crosswalk should be no greater than 75 feet without providing a refuge island (See Figure 14).
7. On bicycle paths, the intersections should be configured so that traffic turning right does not conflict with bicycle traffic (See Figure 15).

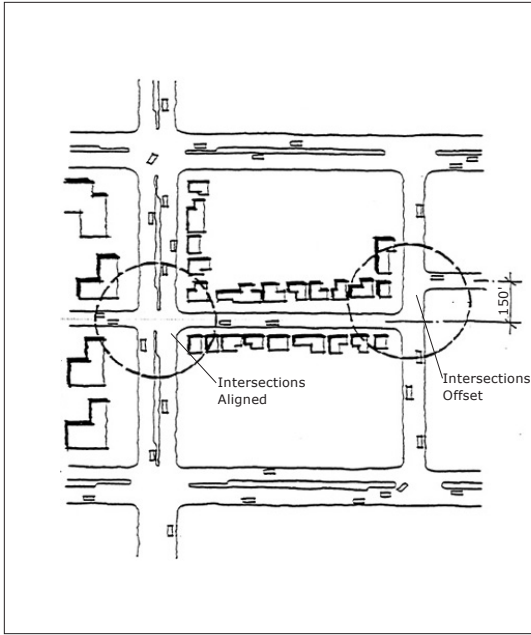


Figure 12

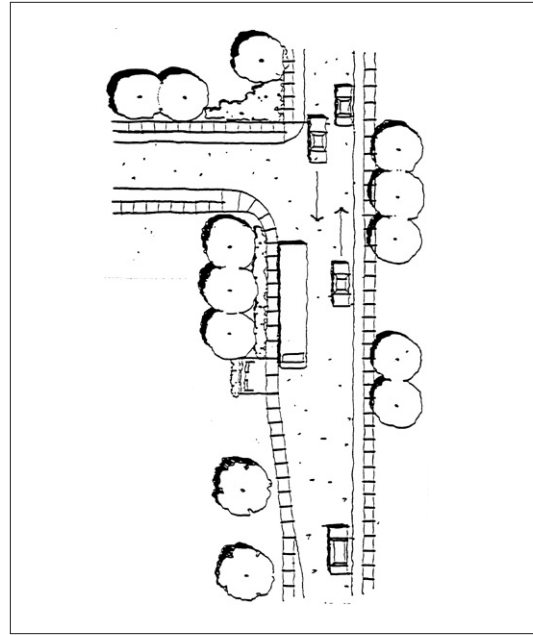


Figure 13

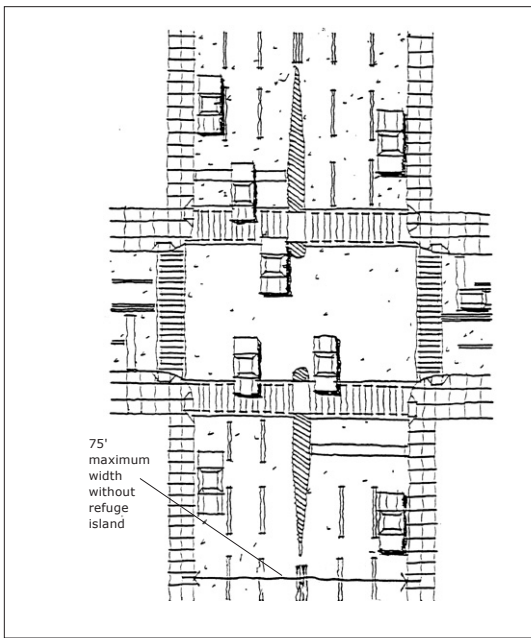


Figure 14

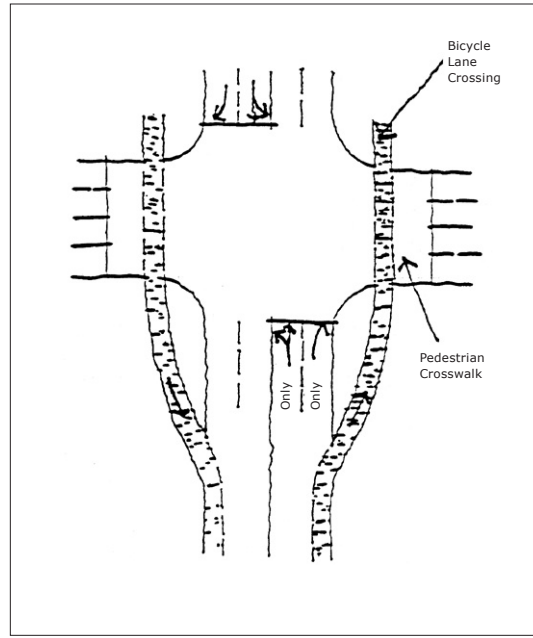


Figure 15

Through Routes

1. In accordance with the Arterial Access Policy, each mile section will have three through routes in the north/south and east/west direction (See Figure 16).
2. While minimum off-sets are encouraged to reduce high-speed cut-through traffic, the three through routes should not be laid out in a confusing and indirect manner (See Figure 17).

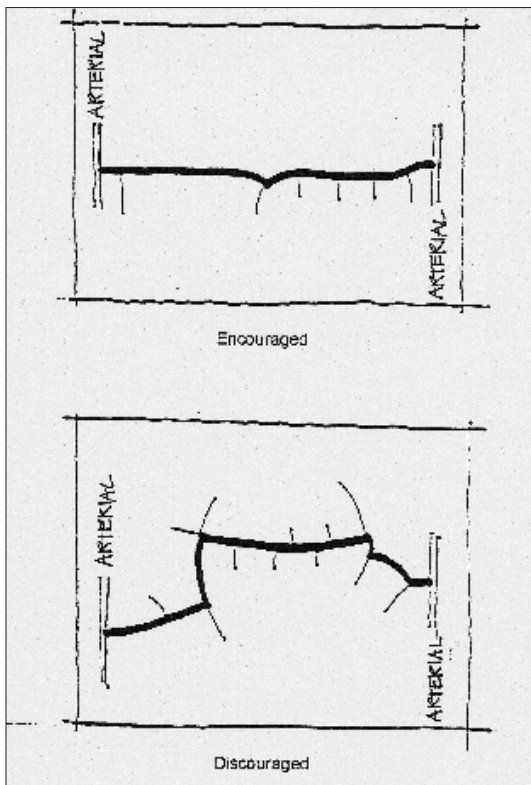


Figure 17

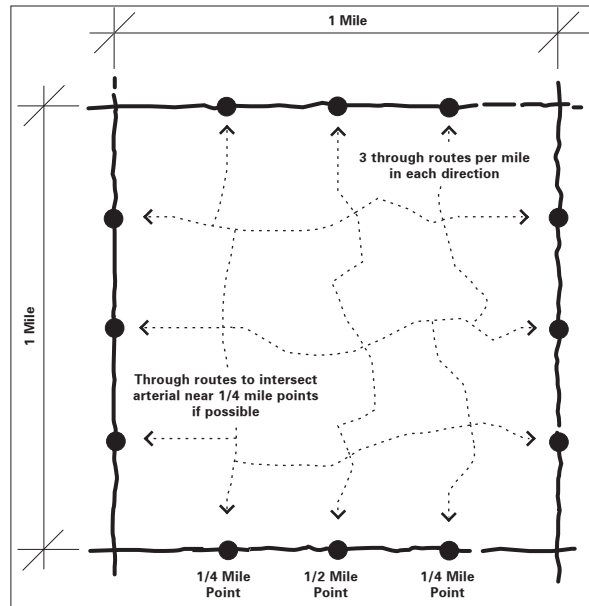


Figure 16

Street Alignment

1. Major and minor arterials should have straight alignments unless topography dictates curves in certain sections. Collectors, subcollectors, and local streets may have straight or curved alignments.
2. In open space or developed recreational land use areas, curvilinear alignments are allowed for major and minor arterials and are encouraged for collectors, subcollectors, and local streets.

Traffic Calming

1. Traffic calming devices and techniques may be installed along local residential streets in accordance with the City of Omaha's Traffic Calming Program.



Roundabout

On-Street Parking

1. Parking on public streets is secondary to the function of providing safe travel to the public. Therefore, on-street parking is prohibited on major and minor arterials.
2. Parking is normally permitted on collector and local streets, but may be restricted to accommodate transit stops, bicycle lanes and maintenance or snow removal operations.
3. On-street parking is encouraged in mixed-use centers.

Private Streets

1. Subdivisions with private streets, sewers and other typically public facilities will be allowed if they meet Omaha's design, service, and street layout standards.
2. Private streets serving 10-acre lot subdivisions in the Ponca and Elkhorn Exurban Zones (see Urban Development Policy Element), will not be required to meet Omaha's design, service and street layout standards. Streets in these areas must meet the County's standards for right-of-way, design and construction.

Alleys

1. Alleys should be encouraged (See Figure 18).
2. Minimum lot widths may be lessened if alleys are utilized.
3. Alleys should be constructed to meet the City standards set out in Chapter 53 of the Omaha Municipal Code.
4. Garages and fences should have a minimum set-back of three to five feet from the alley.
5. The preservation of alleys is strongly encouraged.

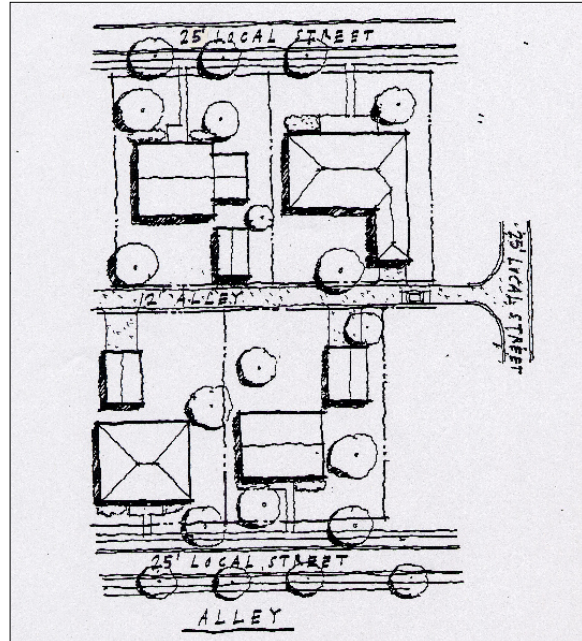


Figure 18



Alley in Residential Area

Bridges

1. All newly constructed bridges in Omaha's planning jurisdiction must be designed to allow pedestrians and bicycle riders safe passage.
2. The construction of a bridge may be necessary to meet the three through streets per mile requirement of the arterial access policy.
3. The City should seek to coordinate and link the trail master plans of Omaha and Council Bluffs at appropriate high use nodes and attractive destinations and attractions on either side of the river.
 - a. The City should request that provision for pedestrian/bike access be included in the design of the South Omaha bridge replacement to satisfy the crossing requirement of the American Discovery Trail and to improve access to the zoo, botanical gardens and the National Trails Center.
 - b. The City should continue to monitor the future of river navigation. The termination of navigation could eliminate some restrictions for adding pedestrian/bike structures below existing bridges due to the current 52 foot clearance required for navigation. This could enable the use of the Illinois Central pivot bridge to be used for access if it were available.
 - c. The City should continue to utilize the services of MAPA and its ability to plan in a multi-state region. Potential monies could be available for building a bridge from Council Bluffs to Carter Lake using the little used Iowa ISTEPA fund.
 - d. The City should support the efforts of local trails organizations as they look for creative funding solutions to bridge the Missouri River.
4. The aesthetics of public bridges should be given equal consideration to the cost and functional design of the bridge. New bridges should be designed with aesthetics in mind.



South 24th & Hickory

Curbs

1. Curbing is required on all streets except for those serving very low-density areas to control drainage, protect pavement edges, and protect sidewalks and lawns from encroachment of vehicles. Curbs must be designed and built according to City design standards.
2. In Downtown and other special areas, curbs ranging from 4 to 8 inches high with steep sides are encouraged but not required. The advantages of these barrier curbs are:
 - a. Pedestrians, street trees, utilities and signs are best protected;
 - b. Curbs establish a positive limit on vehicle encroachment of the border area, minimizing parkway erosion;
 - c. Barrier curbs provide excellent drainage controls;
 - d. In winter, curbs protect the grass from damage by snow plows.
3. In the downtown, granite curbs are encouraged.



Sewer Inlet

Land Use

The Concept Element states:

- A series of mixed-use areas should be utilized in order to help relieve traffic congestion, allow for a more efficient use of mass transit, and help reverse the current pattern of strip commercial development.

The intent of the following guidelines is to describe the relationship between land uses and the surrounding streets. The land use classes (defined more precisely in the land use plan) are :

GUIDELINES

Land Use Classifications Metro Mixed-Use Area

Metro-sized mixed-use areas are intended to be major employment centers that contain high-density areas of a nature similar to that of Downtown, but of a magnitude that would not rival Downtown. The area that extends along West Dodge Road from the Westroads and Regency west to 120th Street is the only area in the Land Use Plan classified as a metro-sized mixed-use area. Metro-sized mixed-use areas would allow for virtually any use except industrial and single-family residential. (Single-family is encouraged to be located surrounding, but not in, mixed-use areas. Specific permitted uses will be outlined in the zoning ordinance.)



Figure 19

Circulation:

- Access to the center is focused on the automobile and mass transit.
- Centers will be located at or adjacent to the intersection of two expressways or the intersection of a major arterial and an expressway.
- Internal circulation is focused on the automobile, transit, and the pedestrian.
- Accommodates heavy volumes of through traffic.
- Shared parking required for non-residential portions of the center. Parking structures may be required.

Community Mixed-use Areas

The community-sized mixed-use area is intended to allow for major grocery and discount stores, major retail stores, major medical and educational institutions, automobile dealerships and other large-scale auto-related uses, moderate- to large-scale civic and cultural facilities, community recreational centers, apartment buildings and townhouses, and moderately-sized office buildings.

Circulation:

- Access to the center is focused on the automobile, but bus service will be provided.
- Accommodates large volumes of through traffic.
- The location of these centers would be at the intersection of a major and minor arterial, two major arterials, or a major arterial and expressway.
- Internal circulation is focused on the pedestrian.
- Shared parking and parking structures are encouraged in non-residential portions of center.



Pedestrian Circulation

Neighborhood Mixed-use Areas

The neighborhood mixed-use area is intended to provide a level of service between that of the smaller convenience area and the larger community-sized mixed-use area. Large-scale grocery stores and drive-up fast-food restaurants are allowed in this district, as well as other stores whose type and scale are appropriate to serve the surrounding neighborhoods. Major retail and discount “box” stores designed to serve a large section of the city are generally not allowed. (See “box” store description in the Future Land Use Element Appendix A). Office, medium-density residential, and civic uses are also allowed and encouraged in the neighborhood mixed-use area.

Circulation:

- Access to the center is focused on automobile, transit, bicycle, and pedestrian modes. The limits of the centers is based on pedestrian walking distance, and the centers will be tied into the city's overall pedestrian and open space system.
- Neighborhood areas will be located at the intersection of a major and minor arterial, two major arterials, or a major arterial and expressway. Generally, the centers of neighborhood mixed-use areas should be no closer than one mile.
- Center can accommodate moderate levels of through traffic.
- Shared parking should be encouraged in non-residential portions of center.

Convenience Mixed-Use Areas

The intent of the convenience area is to provide goods and services at a moderate scale to nearby residences. Typical facilities include convenience stores, grocery stores, gas stations, ATMs, and small offices and shops. Medium-density residential structures, such as duplexes, townhomes and small-scale apartments are allowed and encouraged to locate in convenience areas, although this may not be practical in very small developments. Large-scale apartment buildings or complexes are not allowed.

Circulation:

- Access to the center is focused on the automobile, but bus service should be accommodated
- Accommodates little or no through traffic.
- These areas are to be located at the intersection of a collector and minor arterial (minimum).
- Internal circulation is focused on the pedestrian.
- Shared parking should be encouraged in non-residential portions of center.

Low-Density Residential

Low-density residential areas are intended to be utilized primarily for the construction of single-family detached houses, duplexes, townhomes and other forms of low-density residential housing. In some instances civic buildings, schools or limited high-density housing may be appropriate in low-density residential areas when it can be demonstrated that it is not possible or reasonable to locate them in mixed-use areas.

Circulation:

- Access to housing from street.
- Parking is distributed, not centralized.
- Access between houses is focused on the pedestrian.

Industrial

Industrial, manufacturing, warehouse, retail distribution, and other industrial-type uses are to be located only in designated industrial areas, characterized by large tracts of level ground adjacent to major streets with good access to the interstate.

Circulation:

- Focus on access to and from industrial uses will be automobiles and trucks.
- All parking on site. Shared parking encouraged.
- Ride sharing, van-pooling encouraged.

Highway Commercial

Service stations, hotels and motels, automobiles repair services, and other facilities that serve highway travelers are allowed in highway commercial areas.

Circulation:

- Focus on access to and from the sites via interstate, expressways and major arterials by automobile.
- All parking on site. Shared parking encouraged.



I-80 at 72nd Street West

Civic/Institutional

This land use category includes hospitals, schools, universities, libraries, airports, cemeteries and other uses of a general institutional or public/quasi-public nature. Appropriate civic uses such as libraries schools, fire stations, police stations, and post offices should be located in mixed-use areas when possible, but will be allowed in low-density residential areas as well.

Circulation:

- Because of the wide variety of uses that fall under the civic/institutional category, it is impossible to pinpoint circulation characteristics.

Parks/Open Space

Parks are allowed in either mixed-use areas or low-density residential areas.

Circulation:

- Access to parks is focused on the bicycles, pedestrians, and automobiles.
- Accommodates pedestrian and bicycle through traffic, and in some cases can accommodate automobile through traffic (for example, golf courses).
- Internal circulation is focused on the pedestrian and bicyclist.
- Bicycle parking required as well as automobile parking.



*Omaha Police Department
Southeast Precinct*

Site Design

The Concept Element states:

- It is in these areas (mixed-use centers) that it is particularly important to attempt to group buildings closer together, utilize multi-story mixed-use buildings to the greatest extent possible, employ shared parking and parking structures, and consider pedestrian connections between buildings so that several destinations would be accessible from one parking spot.
- Parking is to be fully integrated into the design concept for all projects and is to be well landscaped. Shared parking and parking structures should be employed when possible.
- The amount of land consumed by auto-related uses, including streets and parking lots, should be reduced.

The zoning ordinance currently lists parking minimums for individual land use types. Projects being built often exceed these minimums usually due to tenant requirements. The intent of the shared parking objectives contained in the Concept Element is to encourage the more efficient use of parking, reduce impervious coverage, pollution and stormwater runoff, improve site design and provide better pedestrian access within mixed-use areas.



Shared Parking

Parking

1. Shared parking should be encouraged at mixed-use centers but is not mandatory. In order for shared parking to be successful, the parking requirements for individual land uses must reflect the average peak demand for parking as closely as possible. The City will allow increased building densities, flexible zoning requirements, and/or reduced infrastructure costs to promote the shared parking concept. In order to qualify for these incentives, projects must utilize the following procedure for determining the number of spaces needed:
 - a. Determine the number of spaces needed for each land use as if it were a separate use. (From the current zoning ordinance).
 - b. Multiply the amount by the corresponding percentage for each of five time periods.
 - c. Calculate the column total for each time period.
 - d. The highest total is the parking requirement.
 - e. Parking spaces to be shared should not be reserved for certain individuals or groups on a 24-hour basis, except of course for reserved handicapped spaces, which should be located near the entrances of each building. These handicapped spaces should be included in the total number of spaces determined by the shared parking calculations.

2. A pedestrian circulation system must be included in mixed-use centers. Separate projects should connect their pedestrian walkways similar to the way that streets and driveways are connected.

3. The City should encourage, but not require, project designs which limit parking lot sizes, disperse lots behind buildings or place them on the interior of blocks (See Figure 20).

4. Allow for on-street parallel or diagonal parking on streets serving mixed-use areas and Downtown where

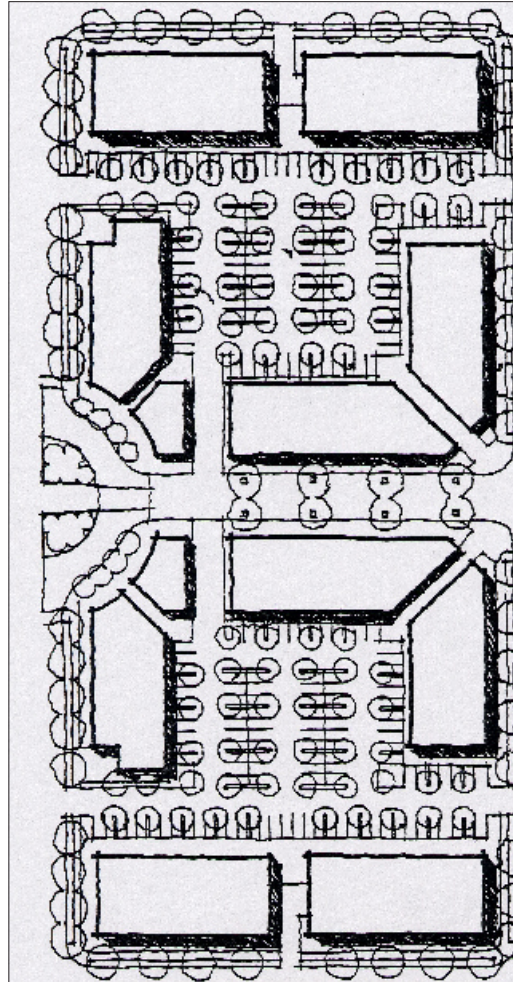


Figure 20

traffic conditions permit and where the speed limit does not exceed 15 miles per hour.

5. If the only pedestrian access to a building passes through a parking lot, the pedestrian access should be separated from the vehicular traffic as much as possible (See Figure 21).

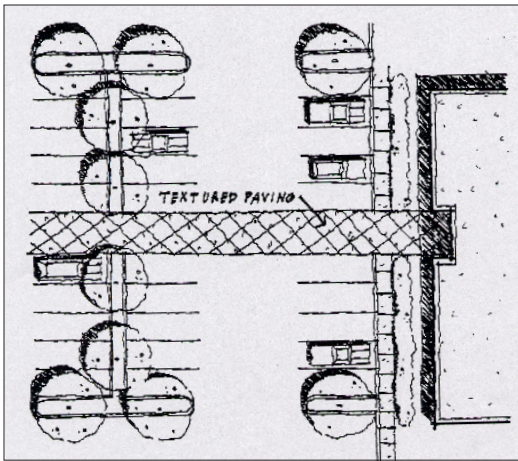


Figure 21

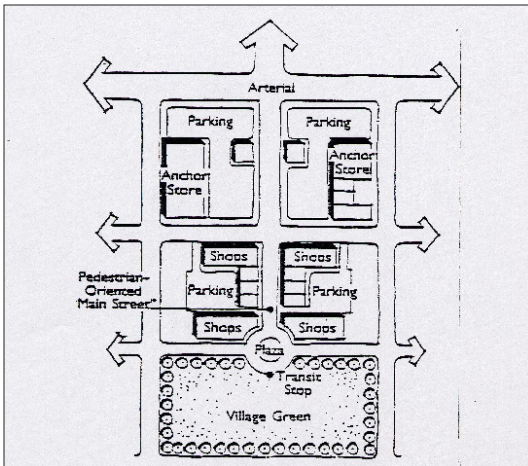


Figure 22

Buildings

Buildings in suburban retail/office centers can be made pedestrian-friendly through a variety of design measures. To create a pedestrian-oriented center, designers of new developments are encouraged to:

1. Orient anchor stores to arterial streets and parking lots, but orient small shops to pedestrian "main streets" or plazas. This new configuration precludes the strip configuration (See Figure 22).
2. Provide direct access from the local neighborhood. When street connections are not feasible or are undesirable, pedestrian paths shall provide connections from surrounding residential neighborhoods to the mixed-use centers.
3. Minimize building setbacks and orient buildings closely to the street edge and sidewalk in mixed-use centers.
4. Design building facades to be visually interesting to pedestrians. Street level windows and numerous building entries are encouraged in mixed-use centers. Large expanses of blank walls along the street are discouraged.
5. Place entries to small shops and offices directly on the street. Buildings with multiple tenants should have numerous entries to the street.
6. Allow for upper floor office or residential uses above retail uses.
7. Conceal loading docks, service areas, refuse collection areas, and storage area from pedestrian views.

Streets

Streets within mixed-use centers must be designed to accommodate pedestrians, slow traffic, provide on-street parking, and create pleasant shopping environments. To do this, new development should consider, but is not required to utilize the following:

1. Neighborhood and convenience mixed-use areas should be located so that four- to six-lane streets do not cut through the site.
2. Limit two lane street widths to two 11-foot travel lanes and on-street parking (See Figure 23).

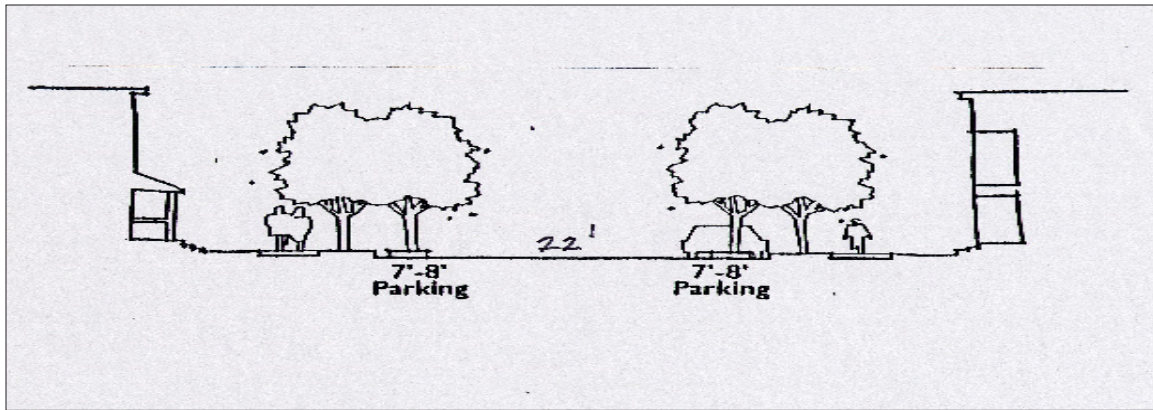


Figure 23

3. Utilize a dense pattern of two-lane streets within the mixed-use areas and avoid the use of “right turn lanes”.
4. Design roads for a reduced speeds of 15-25 miles per hour.
5. Provide extra wide sidewalks (bulbouts) at intersections to reduce pedestrian crossing distances except on service roads used for truck traffic (See Figure 24).
6. In pedestrian-oriented centers, intersections may be designed so that the street pavement gradually rises to meet the level of sidewalks at the intersections, eliminating curbs and creating a plaza-like environment.

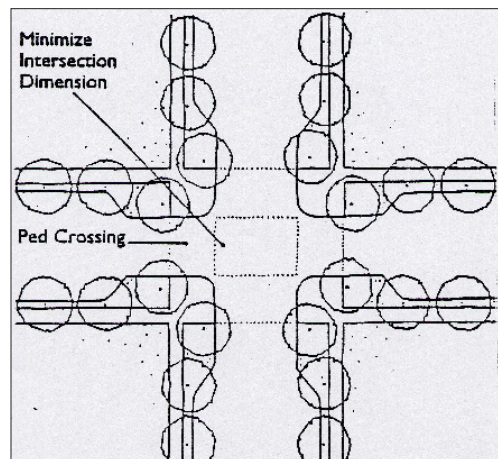


Figure 24

Street Improvements and Maintenance

The Concept Element states:

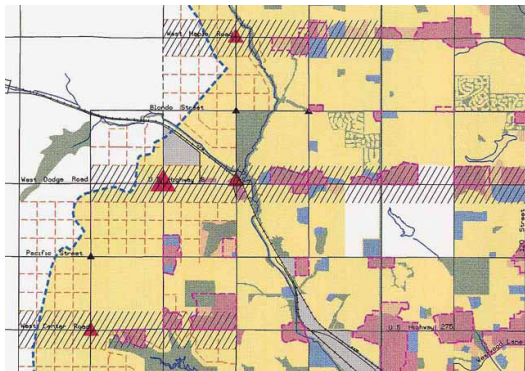
- The City will plan for the realignment of streets and the construction of new street segments in areas where growth is hampered by missing and/or poorly planned street segments.
- The City will continue to balance new street construction with ongoing street maintenance programs.
- Throughout the city and its jurisdiction, Omaha will continue to require adequate streets which promote transportation efficiency.
- The City should avoid changes in land use that would generate traffic in excess of the design capacity of surrounding streets. When changes in land use intensity are allowed that exceed expectations and result in traffic problems, the developer of the land use responsible will be required to mitigate traffic impacts.
- The City will ensure the equitable distribution of public goods and services as efficiently as possible. Those who benefit from City services should be required to pay for the services they receive.

GUIDELINES

Developing Areas

Street and highway improvements are necessary in developing areas to ensure that adequate infrastructure is constructed to accommodate new development. At the same time, street improvements need to be coordinated with other public facilities such as sewers, parks, fire stations and the like to ensure that they do not encourage growth in areas which are lacking in these other necessary improvements.

1. Street widenings and interchanges should be scheduled based on existing and projected growth patterns set out in the Urban Development Policy and the Future Land Use Plan.
2. The County, State, and MAPA through the Transportation Improvement Program (TIP) should consult the City regarding proposed roadway improvements to ensure that the improvements are compatible with the City's transportation and growth plans. Figure 5 shows the roadway improvements needed by 2020 (See Map 1-2020 Network Map in Appendix A).
3. Major developments should not be approved if these developments require road improvements which are not found in the TIP or CIP, unless the developer is prepared to pay for all of the improvements or the City determines that the proposed development provides community benefits which offset the cost.



Landuse Map



114th & Dodge West

Project Ranking

1. The Planning and Public Works Departments should periodically identify areas throughout the city which are experiencing traffic circulation, congestion and safety problems. A priority listing of problem areas should be created based on the following criteria and projects should then be scheduled in the City's CIP.

- a. Physical design factors:
- existing and projected traffic volumes
 - safety concerns
 - street condition
 - route continuity

- b. Other considerations:
- conformance to the city's growth and redevelopment policies
 - economic development considerations
 - urban revitalization
 - continuity with other projects
 - availability of matching funds
 - annexation

2. New construction projects should be built in ways which help reduce long-term maintenance costs.



168th Street



Westward Growth

Financing and Impact Analysis

1. Construction, reconstruction, widenings and other street improvements which benefit the general public should be paid for by the City, County, State, and/or Federal governments. Improvements which benefit only individual home owners or businesses should be paid for privately. Where both private and public interests are served, a combination of funding proportionate to the benefit of each interest should be arranged. In general, street and traffic improvements should be financed as follows:

Interstate	Federal and State funding.
Freeway/Expressway	Primarily State and Federal funding with limited City financial involvement.
Major Arterial	Combination of Federal, State, City and other funds provided by beneficiaries of the improvement.
Minor Arterial	Primarily City funding with occasional State, Federal and other beneficiary supported financing.
Collector	Combination of City/SID and adjacent property owner financing. Abutting property owners should pay for the basic two-lane roadway, while the City/SID will pay for any extra width and intersections. In commercial/office areas where the collector is needed because of the proposed commercial/office development, the extra width should not be a general obligation (G.O.) expense.
Local	Local residential or commercial street improvements will be assessed to the abutting property owners. Traffic calming projects constructed on local streets will be funded in accordance with guidelines established in the City of Omaha's Traffic Calming Program.

2. A traffic impact analysis should be done for any development that will generate over 100 vehicles per hour (two-way), or that may create substantial traffic-related problems.
3. If improvements are necessary solely because of new development, the development should pay the cost. If improvements are needed but cannot be made, the development should not be allowed or should be redesigned to eliminate the need for the improvement.

Developers may be required to participate in the improvement of streets if their project contributes to a reduction in service below Level D. Contributions should be in the form of actual construction of improvements if they are needed immediately. Funds and R-O-W may be set aside for future construction if the improvements are not needed immediately.

Street Maintenance Program

A comprehensive street maintenance program can substantially reduce the City's long term street expenditures while providing the best possible service to the public. A quality maintenance program not only reduces the need for major street improvements but also stretches scarce maintenance dollars.

1. New construction projects must be built in ways which help to reduce long-term maintenance costs.
2. Major street resurfacing projects must continue to be scheduled on a priority basis. Neighborhood resurfacing projects should be scheduled based on a priority ranking system similar to that used for street improvements.
3. An analysis must be carried out on all bridges in need of repair, to determine if the bridges should be repaired, replaced, or eliminated.
4. A study of the historical and architectural significance of the city's bridges should be undertaken and efforts made to preserve or record those identified as important.

Street Vacations

Vacations will be allowed for short stub streets and unimproved streets and alleys which cannot be extended or improved to provide for through traffic due to physical or other similar barriers.



Street Maintenance



New Road Construction

Alternative Travel Modes

The Concept Element states:

- A pedestrian- and open-space system will be employed to facilitate pedestrian and other non-motorized movement between areas of the city and to link low-density residential and high-density mixed-use areas together.
- Sidewalks should be provided in all areas of the city.
- Future development should provide for bikes, pedestrian, and mass transit.
- Omaha's Downtown will be the clear and positive "image center" for the city.
- Pedestrian systems should be developed to link areas of the city together.
- To provide transportation (bikes and pedestrian movement) and recreation alternatives, Omaha's major activity centers will be interconnected by the linear trail system.
- Transportation planning for the city should include planning for an improved mass transit system and alternative modes of transportation.
- Throughout the city and its jurisdiction, Omaha will continue to promote transportation efficiency and reduce congestion.

The Master Plan Concept Element calls for new office/commercial development to occur in mixed-use areas. The Master Plan states that these centers, no matter the size, must be pedestrian-oriented.



144th Street

Sidewalks

1. Development plans should accommodate and encourage pedestrian activity, giving it the same importance as vehicular access. Sidewalks should connect individual buildings and provide a link to nearby bus stops and commercial centers.
2. Sidewalks will not generally be required in residential developments with densities of one unit per acre or less, unless
 - a. the development is within walking distance of a school or,
 - b. the dwelling units have been clustered on lots smaller than one acre, or
 - c. the City determines there is a special pedestrian problem.

Handicapped Accessibility

1. Provide islands and medians to be used as pedestrian refuges (See Figure 11).
2. Provide bulbouts, or choked intersections where possible to reduce crossing distances without moving the crosswalk away from the intersection (See Figure 24).
3. Provide audible/tactile messages for the sight-impaired/blind pedestrian at signalized intersections in accordance with the American Disabilities Act.
4. Provide pedestrian crosswalks on all legs of a signalized intersection.
5. Provide obstacle-free sidewalks and curb ramps at all street crossings.
6. Separate pedestrian paths from vehicle areas by installing pedestrian paths from sidewalks to buildings (See Figure 21).
7. Provide concrete pad between the sidewalk and curb for wheelchair access to mass transit.

Skywalks

1. The use of skywalks should also be expanded in the Downtown area to encourage pedestrian activity during inclement weather.
2. A core system of skywalks should be constructed between 15th and 19th Streets from Capitol to Harney Streets (See Map 4-Skywalks in Appendix A).
3. Care should be taken to design the skywalk system so that it augments rather than replaces street-level sidewalks as the basic pedestrian system.

Bicycles

Map 5-Future Bicycle Facility Map in Appendix A shows the future bicycle network in Omaha. The intent is to provide a safe route via bicycle to all the mixed-use centers in Omaha. The routes were chosen based on traffic volume, directness between centers, and topography. Bicycle facilities located adjacent to these streets will be constructed as the roads are improved. In the meantime, four-foot sidewalks will be provided on both sides of the street.



Field Club Trail

Bicycle Facilities

1. There are three classifications of bicycle facilities:(see Map 5-Future Bicycle Facility Map in Appendix A)

Bicycle trail: An exclusive bicycle facility with cross traffic minimized. Bike trails shall be constructed of asphalt, concrete, or other all-weather surface. Bicycle trails shall be a minimum of eight feet wide, ten feet preferred.

Bicycle path: A separate bicycle facility located next to minor and major arterials. Bike paths shall be located on one side of these streets and shall be ten feet wide.

Bicycle route: A street that is signed as a bicycle route, but which does not include a separate facility for bicycles. These are normally located on local roads.

2. Bicycle-friendly drainage grates are required along all streets.

3. The priorities for the replacement of grates will be given to those streets designated as bicycle routes.

4. Improvements allowing safe passage for bicyclists will be incorporated into maintenance and construction work on all streets and bridges.

5. Bicycle routes on local streets will be replaced by bicycle paths and trails as more of these facilities are built.

6. The following criteria should be used for trail construction unless there is compelling evidence to deviate from these guidelines. The ten foot trail is to be constructed within a 40-foot corridor and the corridor must be:

- a. outside of the proposed Papio Missouri River NRDs channel improvement and maintenance easement, and
- b. outside of the 3:1 plus 20 foot erosion easement, and
- c. above the flood elevation set by FEMA for a ten-year flood, and
- d. outside the floodway.



On street bicycle route

Mass Transit

In order to provide other options to the automobile, the City must rethink mass transit's role and encourage design which makes other options to the car more attractive. Increasing the role of transit in the city will not only make for a more efficient city, it will open up opportunities to those who don't drive, low-income families, children under 16, and senior citizens.

A successful transit system depends on a concentration of riders and destinations. Potential transit riders are less likely to walk to a transit stop if it is more than one-quarter mile from their home. New construction is currently not being built at high enough densities to provide a pool of riders or allow a bus to operate efficiently. The future land use map shows three "transit corridors": West Center Road, West Dodge Road, and West Maple Road. The purpose of these transit corridors is to develop the necessary densities to support transit.

This high-density development will have other benefits besides increased transit ridership. Transit supportive development is a more efficient use of land and may curb the need to move the sewer boundary further and further out. Also, attractive transit will reduce household travel costs and auto expenses as well as provide a range of affordable and diverse housing stock. Businesses in the corridors will benefit since employees and customers will enjoy less congested streets.

Metro Area Transit

1. New developments must be designed to accommodate MAT's recommended standards for bus traffic.
2. If development proposals consisting of land uses which MAT attempts to serve are located beyond the 20-year service area (See Metro Area Transit Service Area Map in Appendix B), the developer should contact MAT to review how to best serve these developments. These uses are:
 - Colleges and hospitals
 - Apartment units in complexes of 48 units or more
 - Employment sites
 - Major shopping centers
 - Senior citizen towers/retirement communities
3. Civic uses and day care facilities are strongly encouraged at MAT's future park and ride lot locations.
4. Developers of mixed-use projects should contact MAT to review the need for including park and ride stalls.
5. Mass transit service should be provided between the airport and Omaha's major hotels, Downtown and the zoo.

Transit Corridor

1. To support viable bus service, residential densities along the West Maple, West Dodge and West Center corridors need to average eight dwelling units per net residential acre (du/ac).
2. To obtain this density, a variety of residential densities should be encouraged within these corridors: apartments in the mixed-use areas, and a mix of townhomes, duplexes, and single-family homes in the remaining portion of the corridor.
3. In addition, high-density housing outside of these corridors should be limited, not only to reduce traffic congestion, but to help encourage high-density housing development within the three corridors.



*Apartments within the Maple
Street Corridor*

Trolleys

The electric street car line flourished in Omaha between the 1880s and the 1950s (See Map 6-Omaha Street Railway in 1930 in Appendix A). Neighborhoods such as Benson and Dundee began as Street Car suburbs. Today, across the country, cities such as Portland, Oregon and Memphis, Tennessee are reintroducing the trolley to serve as a transportation function as well as an economic boost for tourism. The City of Omaha, in conjunction with MAT and MAPA, recently funded a feasibility study to determine whether or not the trolley that ran down Tenth Street could be reinstated to connect the Civic Auditorium, Old Market, Western Heritage Museum, the zoo, and Rosenblatt Stadium.

1. The City should pursue the construction of the Tenth Street Trolley (See Map 7-Proposed 10th Street Trolley Alignment in Appendix A).



Dundee Streetcar Art

Demand Management

The intention behind a Transportation Demand Management Plan is to address congestion by decreasing the volume of vehicle trips on the existing road network, as opposed to expanding the road network. It focuses on maximizing the movement of people, not vehicles, within the transportation system. This can be done by increasing the number of persons in a vehicle, or by influencing the time of travel. Decreasing the volume of vehicle trips is far less costly than providing new transportation facilities and the decrease in trip production will reduce vehicle-generated air pollution. Travel Demand Management relies on incentives or disincentives to make shifts in travel behavior attractive.

The City Council should consider:

1. Adopting a regional resolution supporting voluntary no-drive days. This program was implemented in Denver and Phoenix by requesting persons whose private automobile license plate ends in zero or one travel by means other than single occupancy vehicles on Mondays, those with license plates ending with two or three select alternative means of transportation on Tuesdays, etc.
2. Establishing High Occupancy Vehicle lanes on I-80, West Maple, West Dodge, and West Center Roads for buses, vans and car-pools.
3. Adopting an ordinance that would encourage, through incentives, shared parking for mixed-use areas.
4. Allowing for a reduction in the parking requirement for developments which provide showers and locker rooms for employees and/or park and ride stalls.
5. Adopting a Transportation Demand Ordinance which would provide incentives for employers with 100 or more employees to submit a commute trip reduction plan which may include:
 - a. Provision of preferential parking or reduced parking charges for high occupancy vehicles
 - b. Increasing parking charges for single-occupant vehicles
 - c. Provision of commuter ride matching services to facilitate ride-sharing
 - d. Provision of subsidies for transit fares: IRS Code, Section 162 permits deduction of the costs as an ordinary business expense
 - e. Provision of vans for vanpools
 - f. Provision of subsidies for carpooling or vanpooling
 - g. Permitting the use of the employer's vehicles for carpooling or vanpooling
 - h. Permitting flexible work schedules to facilitate employees' use of transit, carpools, or vanpools
 - i. Cooperation with transportation providers to provide addition regular or express service to the work site
 - j. Construction of special loading and unloading facilities for transit, carpool and vanpool users

- k. Provision of bicycle parking facilities, lockers, changing areas and showers for employees who bicycle or walk to work
- l. Provision of a program of parking incentives such as a rebate for employees who do not use the parking facilities
- m. Establishment of a program to permit employees to work part- or full-time at home or at an alternative work site closer to their homes
- n. Establish a program of alternative work schedules such as compressed work week schedules, which reduce commuting and
- o. Implementation of other measures designed to facilitate the use of high-occupancy vehicles such as on-site day car facilities and emergency taxi services

Reverse Commuting

Reverse commuting is a term to describe the daily journey of city residents who have jobs in the suburbs. Many of these job sites do not have adequate mass transportation to serve its employees. The best possible way to address this problem is to bring job and shopping opportunities to the inner-city.

1. The City should assist in the development, revitalization or stabilization of commercial and employment centers in low-income areas to help offset the lack of adequate transportation alternatives.
2. The City should work with MAT to identify low-income neighborhoods which are in need of additional mass transit service and help in the formulation of a plan which would provide adequate service. This service should not be measured based on the number of passengers it serves, but on the number of job placements it helped provide.

Streetscape

The Concept Element states:

- Screening and/or buffering such as fencing, berms and landscaping should be utilized along major corridors.
- Omaha's major urban corridors should be attractive, visually cohesive and well landscaped.
- Omaha's streets will be made more attractive through increased landscaping.
- Consideration should be given to landscaping all thoroughfares in Omaha's jurisdiction, from the interstate to residential streets.
- Pedestrian- and open-space systems should be developed to link areas of the city together and should include amenities such as landscaping, seating, lighting, and bicycle paths.
- Signs should not be the dominant visual feature of the street and should be limited to those needed for identification and traffic control.
- Major entries into Omaha, such as Abbott Drive, the interstate and West Dodge Road should be attractively designed and portray a positive image. The visual qualities of land-uses adjacent to major entries should be considered.
- Omaha's historic parks and boulevard system should be retained and enhanced. The treatment of selected major thoroughfares, such as parkways, should be considered.
- Along with the development of new trails, the City will strive to restore and improve the original boulevard system.



Abbott Drive

GUIDELINES

Plants

Plants provide a variety of different functions: climate and glare control, aesthetics, architectural enhancement, erosion protection, and delineation of space. They add beauty to the city's street system and improve the quality of life for city residents.

1. Existing mature trees should be retained in roadway design when feasible. If trees must be removed, every attempt should be made to transplant them within the project site; otherwise, new trees may be planted elsewhere on the site.
2. Street tree plantings should be designed to provide scale, shade, block winds, screen or enhance views, and to provide a protective barrier between pedestrian and vehicular circulation.
3. Trees and shrub selection and location should provide for:
 - * low maintenance
 - * root systems that will not damage sidewalks, pavement, and underground utilities
 - * plants tolerant of pruning, chemicals and drought
 - * branching patterns which do not interfere with vehicle and pedestrian movement
 - * life expectancy of at least 60 years.
4. Appropriate shrubbery and creeping vines should be provided along all walls and sound barriers adjoining public rights-of-way.
5. Shade trees should be planted along all streets (See Figure 25).

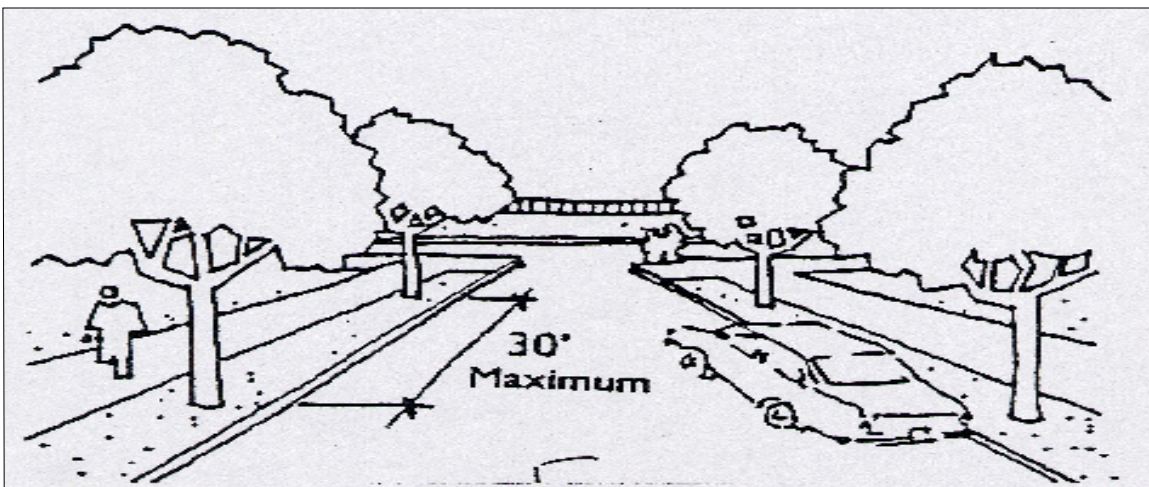


Figure 25

6. The intensity of street landscaping will be based on a combination of the street classification and the abutting land use. In general, landscaping should increase in intensity as the street size and volume of traffic on the street increases. Similarly, landscaping levels should increase in intensity as the land use intensity decreases (See Figure 26).

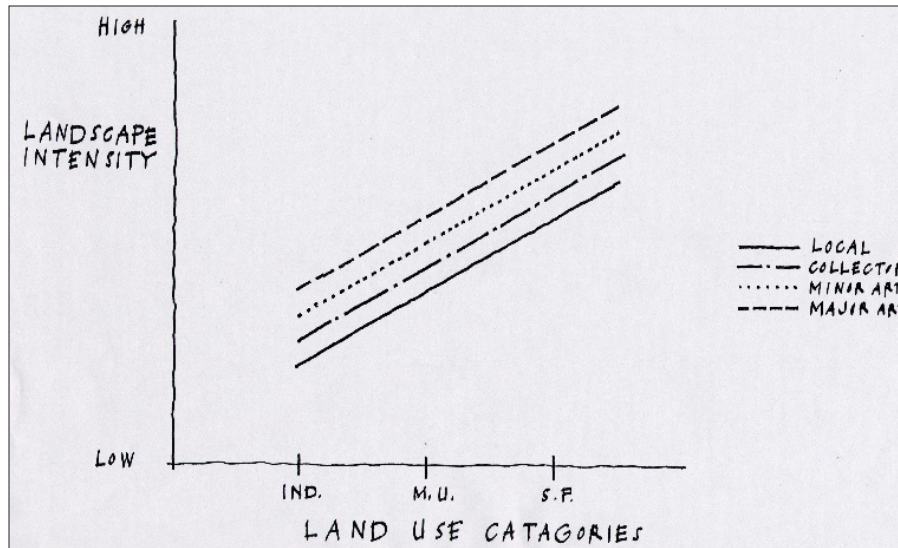


Figure 26



Dundee

Streetscape Amenities

Streetscape amenities, such as bicycle parking, bus shelters and benches, accommodate and encourage pedestrian activity and the use of non-automobile travel modes while providing visual relief to hard surface areas.

1. Streetscape amenities should not interfere with driver visibility triangles and utilities (See Figure 27).
2. Where the establishment of a distinctive street character is important, such as a neighborhood center, the types and colors of lighting fixtures used should contribute to that character.
3. Pedestrian furniture should be compatible with the streetscape theme, durable, easily maintained, and easily repaired. Transportation furniture must not block sidewalk travel.

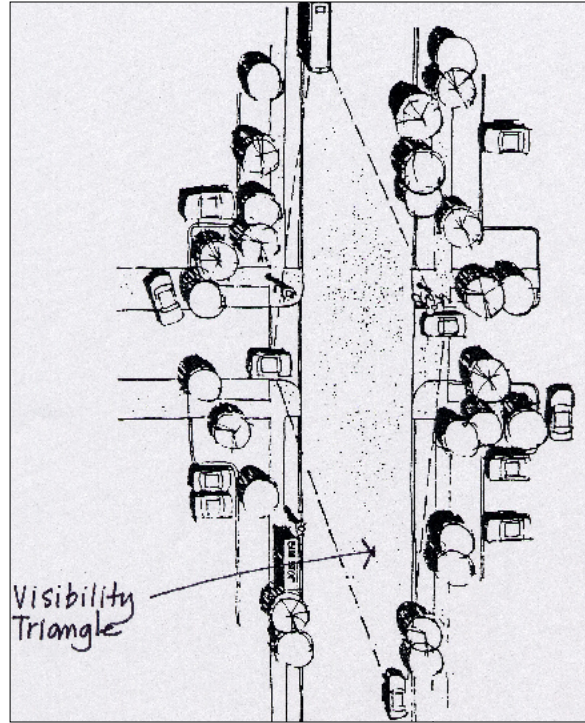


Figure 27

4. Tree canopies should shade pedestrian places, heavily-traveled pedestrian routes, and bus stops.
5. Focal points (clocks, sculpture, planters) should give a sense of place and identity to important locations in the city, such as the mixed-use centers.
6. Loading docks, service areas, refuse collection areas, and storage areas shall be concealed from public view. No service, storage, maintenance or loading area may extend into a landscape setback buffer area.
7. Utility (traffic signal boxes, power poles, transformers, underground cables) design should minimize the visual presence of utility structures within the streetscape.



Focal Point

Signs

1. Signs should not block drive sight visibility triangles, block routes of travel, or conflict with utilities (See Figure 27).
2. One sign per subdivision entrance is allowed on a corner of the collector and arterial streets. Entrance signs will not be allowed within the right-of-way, either on the side of the street or on a median.
3. Signage should provide identification while not detracting from the desired character of the streetscape.
4. Only small, low-profile signs are recommended in residential areas. Apartments and subdivisions, including any allowed non-residential uses, could have identification signs.



Regency

Major Entries to the City

Figure 28 shows the major entries into Omaha, or the “gateways” to the city. These gateways are corridors that herald an entrance to the city. The goal of gateway planning is to arrange this entrance so that it rewards the viewer with a sense of arrival and a positive image of the place.

1. Overlay zoning districts should be adopted for the areas shown on the attached map as Omaha's gateways. This overlay zone will guide the color, signage, texture, spacing, landscaping, and the bulk of the buildings so that all land uses in the zone contribute to the sense of place.

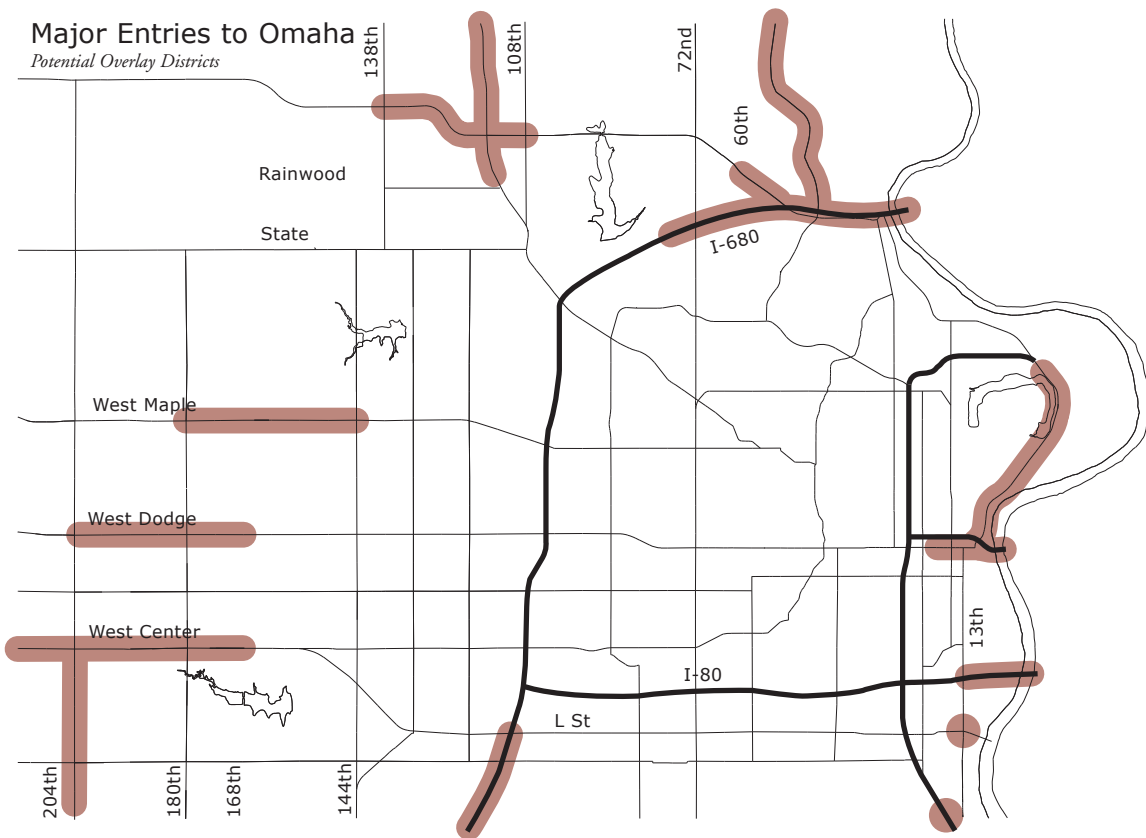


Figure 28

Boulevard System

1. The City should pursue a Local Landmark status, as well as a National Register of Historic Places designation for the original boulevard system.
2. The City should expand the boulevard and parkway system in the newer areas of the city. The 144th Street corridor is an example of this expansion.



Minne Lusa Boulevard

Other Transportation Facilities

The Concept Element states:

- The City will assist in upgrading existing central city infrastructure in order to accommodate economic and community development.
- Future development shall provide for bikes, pedestrians, and mass transit. When the activity center concept becomes reality, the city will explore the feasibility of constructing a fixed transit (e.g., monorail or light rail) system that connects the major centers.

GUIDELINES

Municipal Docks

Barge traffic on the Missouri River has always played a part in the economic vitality of Omaha. The movement of goods through the area must be accommodated by the city's transportation system, including the river.

1. The City should continue to work to improve highway and rail connections to barge terminals.
2. Recent efforts by the States of Nebraska and Iowa to increase barge traffic on the Missouri River should be supported.
3. The City, through the Municipal Dock Board, should continue its efforts to improve and expand the use of a Municipal Dock. If necessary, alternative locations should be explored to allow for expansion and improvement.



Downtown Omaha Raihyard

Airports

There are four airports located in the Omaha planning jurisdiction: two owned by the City of Omaha - Eppley Airfield and Millard, and two privately-owned air fields - North Omaha and Skyranch Airport (See Map 8-Airfields in Appendix A). Eppley Airfield is the only airport in the metropolitan region handling commercial passengers and freight.

Eppley Airfield is owned by the City of Omaha and governed by the Omaha Airport Authority. The facility handles three types of aviation activity: general aviation, commercial service, and a small amount of military aviation because of its proximity to Offutt Air Force Base. Eppley Airfield is classified as a primary commercial service airport in a small-hub market. As such, the airport functions not only as a general aviation facility for the metropolitan area, but also as a commercial service facility for a multi-county region.



Eppley Airport

Eppley Airfield is situated within the east corporate limits of Omaha on over 2,650 acres, 4.5 miles north-east of the central business district on the Missouri River. The facility is well served by the Storz Expressway and Abbott Drive. Mass transit does not serve the facility. Taxi service is available on a 24-hour basis.

Eppley Airfield is situated within the east corporate limits of Omaha on over 2,650 acres, 4.5 miles north-east of the central business district on the Missouri River. The facility is well served by the Storz Expressway and Abbott Drive. Mass transit does not serve the facility. Taxi service is available on a 24-hour basis.

Recently, Eppley Airfield has expanded to serve the growing air freight industry. Annual cargo totals have risen since these improvements, were made. For example, the cargo tonnage handled in 1988 came to 19,053 tons. In 1993, the cargo total came to 102,266,201 tons. Eppley has also experienced an increase in mail freight, from 18,879 tons in 1988 to 62,383,867 tons in 1993. Future improvements include a new cargo apron to continue to support the growth in cargo handling at the airport.

Eppley also recently expanded its passenger terminal facilities. The number of passengers traveling into and out of Eppley in 1994 totaled around 2,560,000 people. Passengers not only come from the Omaha metropolitan area, but from as far away as Des Moines, Sioux City, and Lincoln. This can be attributed to lower fares out of Omaha. In order to better serve the passenger carriers, the Airport Authority would like to extend the runway 1,100 feet to allow for large planes traveling long distances, such as the west coast.

Eppley plans other improvements over the next 10 to 15 years, such as parallel taxiways, new cargo facilities, and a new hotel. However, these improvements will not require expansion beyond the airport boundaries and should not adversely effect the surrounding land uses.

The Millard Airport is owned by the City of Omaha and operated by the Omaha Airport Authority. It was built as a reliever airport for small aircraft and currently averages 500 to 600 planes per week. These are small (under 12,500 pounds) and privately-owned. The only commercial activity at the Millard Airport is limited charter service.

The Millard Airport physically has no room for improvements. A study was recently conducted to determine whether or not Omaha needed a new reliever airport. The study concluded that there was no justification for a new airport, in light of the fact that Plattsmouth and Fremont have recently upgraded their airports, and that Blair has plans to improve its as well.



Millard Airport

1. Mass transit service should be provided between the airport and Omaha's major hotels, Downtown, and the zoo.
2. Access between I-680 and the Storz Expressway should be improved to better serve the airport.
3. The City should continue to regulate development around the city's airfields. Such regulations include height limits, limits on land uses which affect radar or radio communication, and lighting that may be confused with airport lighting.

Railroad Service

The advent of the family automobile and airline passenger service marked the beginning of the decline in railroad passenger service across the country. Omaha was no exception and in 1971 the National Railroad Passenger Corporation took over all privately-operated rail passenger service. Meanwhile, air and bus lines saw continuing increases in ridership until the middle of the 1970s when bus ridership began to decline dramatically.

Today Omaha is served by two AMTRAK passenger trains per day. Eastbound AMTRAK runs to Chicago and provides connections to other destinations in the eastern United States. Westbound trains provide direct service to Denver, Seattle, San Francisco and Los Angeles. By marketing to special interest groups and offering price breaks, growth has been good locally. AMTRAK boardings have increased by 23% since 1988 from 25,650 passengers to 36,616 in 1994. AMTRAK has also initiated a bus collector service in several states, including Nebraska, as a means of increasing ridership. This service began bringing AMTRAK passengers from Kansas City and Des Moines to Omaha to board the train. The AMTRAK facility at Ninth and Pacific Streets is not expected to require any major expansion for the next ten years.

Omaha is the headquarters of the Union Pacific Railroad, as well as the location of the Harriman Dispatching Center. This facility, located near Con-Agra in Downtown, is the largest and most sophisticated train tracking facility in the United States. It tracks all of Union Pacific's rails in 19 states. Map 9-Active Rail Lines 1995 (in Appendix A) highlights all active rail lines in Omaha.

1. The City will actively pursue the acquisition of abandoned railroad R-O-W or soon to be abandoned R-O-W for future streets and/or trails in its zoning jurisdiction.
2. Mass transit service should be provided between the depot and Omaha's major hotels, Downtown.
3. Generally, industrial property with rail access should not be allowed to change to other uses.
4. The City should explore the development of additional rail served industrial sites.
5. The City should establish a fund to facilitate R-O-W acquisition.



Amtrak Passenger Terminal

Elevated Rail

1. The City should pursue an elevated rail system along the Riverfront connecting Eppley Airfield to Downtown and continuing south to Bellevue and Offutt Air Force Base.
2. The City should pursue a high speed rail line connecting Omaha and Lincoln.

Appendix A

Master Plan as a Guide

The Omaha City Charter establishes the master plan as a general guide for the physical development of the city. Deviations from the Plan may be allowed by the Planning Board or City Council as deemed necessary to further another important master plan objective.

Amendments to the Transportation Element

Approved by Ordinance (No. 34337) October 1997

Amended by Ordinance (No. 34661) September 1998

Amended by Ordinance (No. 34964) July 1999

Amended by Ordinance (No. 35829) January 2002

Amended by Ordinance (No. 35830) January 2002

LAND USE	WEEKDAY		WEEKEND		NIGHTTIME
	8:00 A.M. - 12:00 P.M.	5:00 P.M. - 12:00 A.M.	8:00 A.M. - 12:00 P.M.	5:00 P.M. - 12:00 A.M.	12:00 A.M. - 6:00 A.M.
Office	100%	10%	20%	5%	5%
Retail	70%	90%	100%	60%	5%
Restaurant	70%	100%	100%	100%	10%
Daycare	100%	100%	5%	5%	5%

LAND USE	WEEKDAY		WEEKEND		NIGHTTIME
	8:00 A.M. - 12:00 P.M.	5:00 P.M. - 12:00 A.M.	8:00 A.M. - 12:00 P.M.	5:00 P.M. - 12:00 A.M.	12:00 A.M. - 6:00 A.M.
Office	607	61	121	31	31
Retail	336	432	479	288	24
Restaurant	149	212	212	212	22
Daycare	60	60	3	3	3
Total	1,152	765	815	506	80

Below is an example of how shared parking should be calculated for a community mixed-use center. The mixed-use center in this example consists of office, retail, daycare and restaurants. The number of spaces shown reflect current ordinance requirements.

	CURRENT ORDINANCE	
Office	158,000 sq. ft	607 spaces
Commercial	119,600 sq. ft	479 spaces
Restaurant	17,400 sq. ft.	212 spaces
Daycare	9,400 sq. ft.	60 spaces
Total		1,358 spaces

Although multi-family is also included in mixed-use centers, it is not included in the shared parking equation. Apartment complexes tend to reserve spaces for tenants, therefore precluding them from shared parking. However, the developer of apartments is encouraged to participate in a shared parking situation for visitors to the apartment complex, but it won't be mandated as it will for the other uses of the mixed-use center.

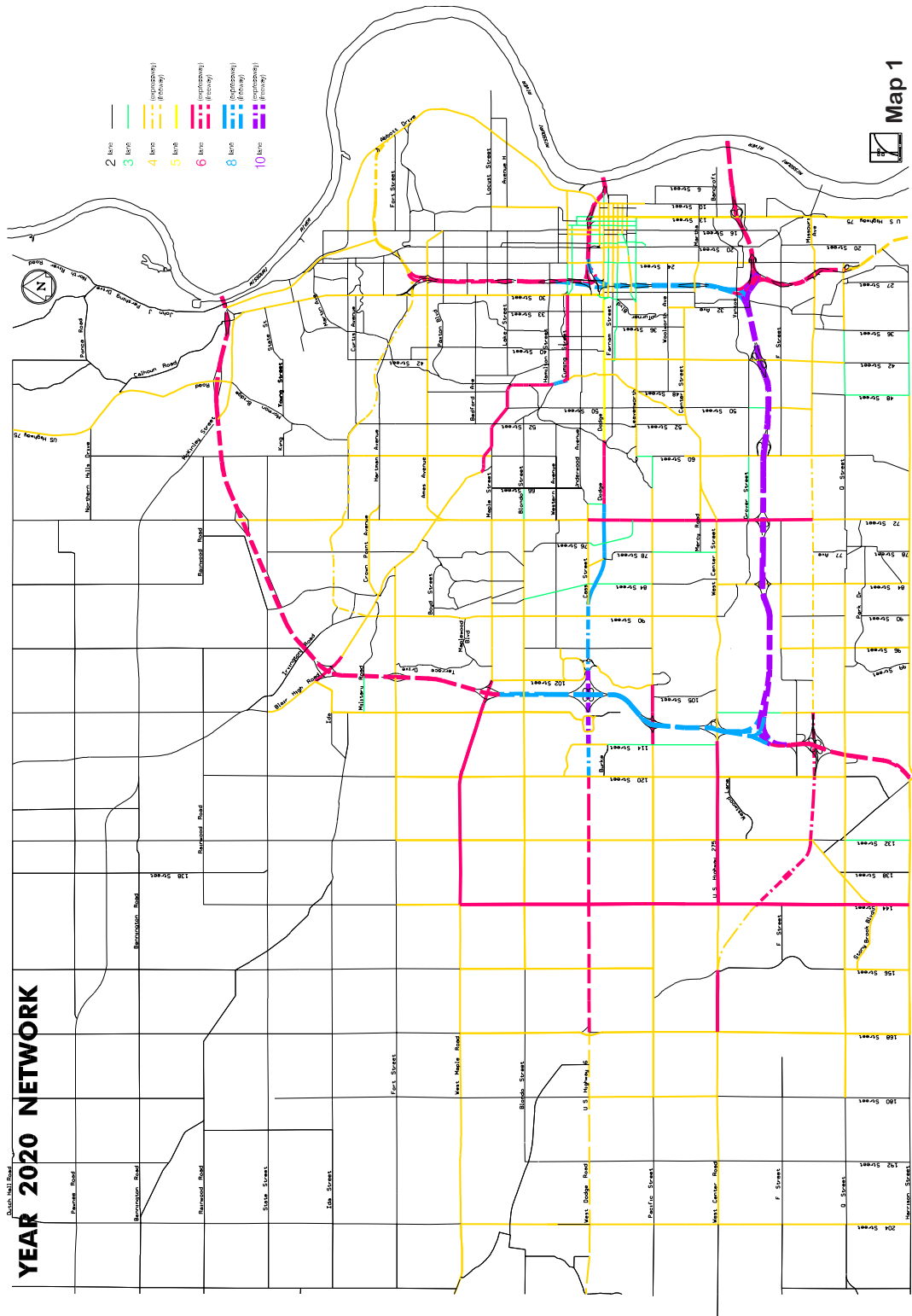
If the above land uses were to develop individual parking lots, the parking requirement would be 1,358. If parking were shared, then 1,152 spaces would be required, a 206 space difference.

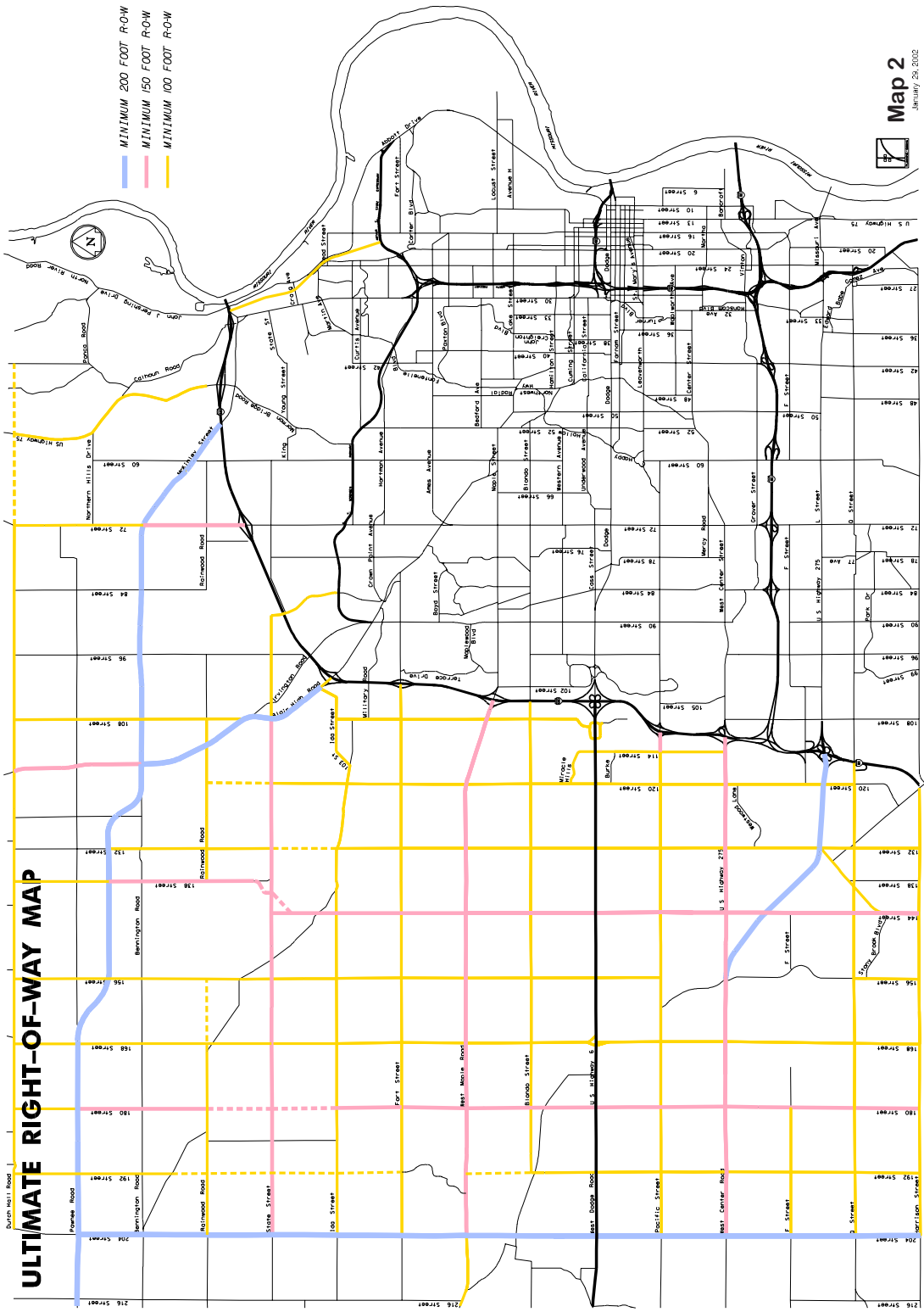
CHAPTER 53
TABLE 53-8
STREET DESIGN STANDARDS

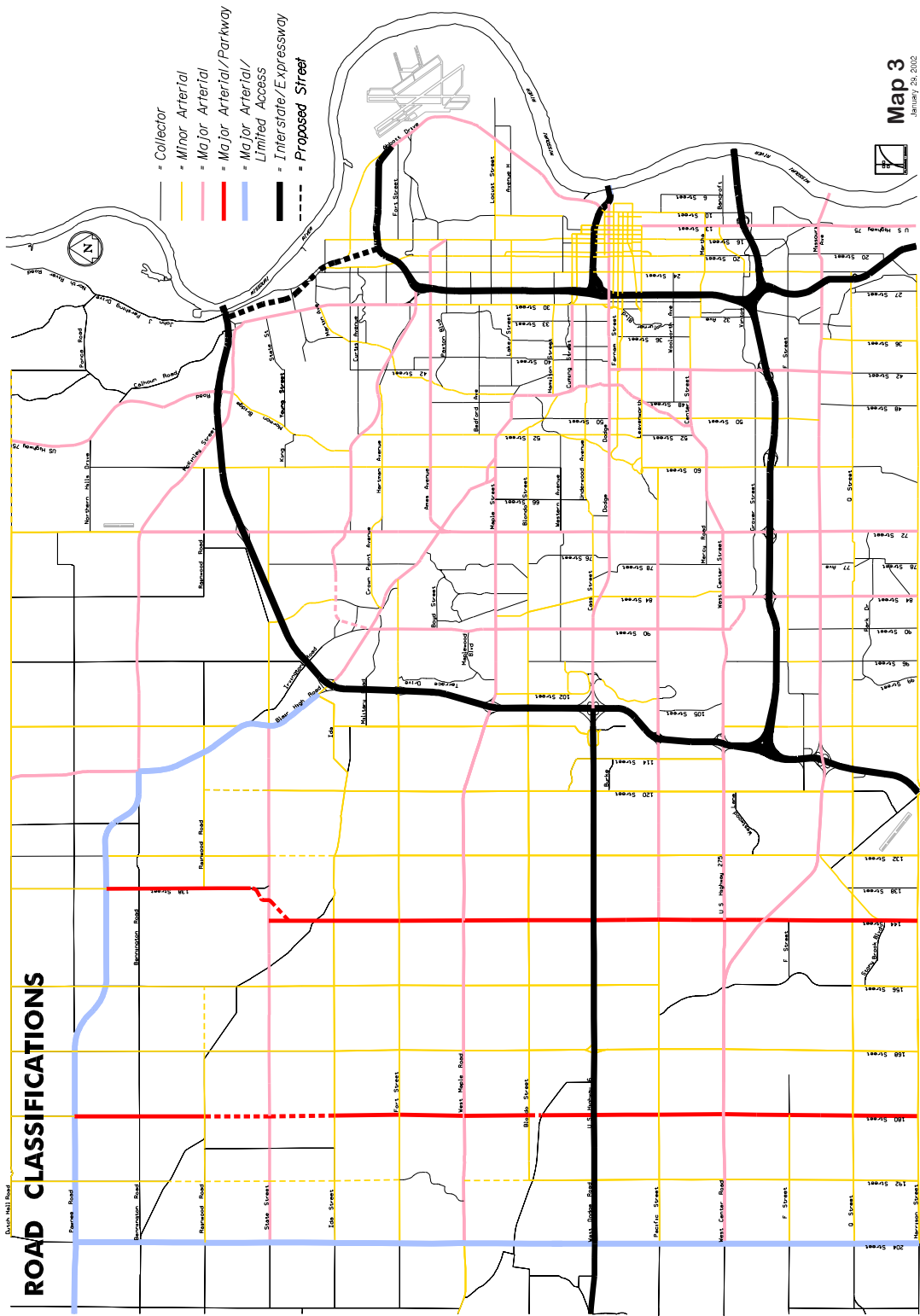
STREET CLASSIFICATION	R-O-W WIDTH	PAVEMENT WIDTH BACK TO BACK	MIN. HORIZ. CURVE RADIUS	MAX GRADE	MIN. STOPPING SIGHT DISTANCE
Major Street	(1)	(1)	(1)	(1)	(1)
Collector Street					
Industrial	50'-66' ⁽²⁾ (15m-20m)	30'-50' ⁽³⁾ (9.0m-15.0m)	300'(90m)	8% ⁽⁴⁾	250'(75m)
Commercial	50'-66' ⁽²⁾ (15m-20m)	30'-50' ⁽³⁾ (9.0m-15.0m)	300'(90m)	8% ⁽⁴⁾	250'(75m)
Residential	50'-60' ⁽²⁾ (15m-20m)	30'-50' ⁽³⁾ (9.0m-15.0m)	300'(90m)	8% ⁽⁴⁾	250'(75m)
Local					
Industrial	50'(15m)	30'(9.0m)	200'(60m)	8% ⁽⁵⁾	200'(60m)
Commercial	50'(15m)	25'(7.8m)	200'(60m)	8% ⁽⁵⁾	200'(60m)
Residential	50'(15m)	25'(7.8m)	100'(30m)	10% ⁽⁵⁾	175'(55m)
Marginal Access Street	(6)	(6)	(6)	(6)	(6)
Alleys	22'-30'(7m-9m)	12'-20' ⁽⁷⁾ (3.6m-6.0m)	100'(30m)	10%	120'(40m)
Cul-de-sac Street					
Industrial	50 ⁽⁸⁾ (15m)	30 ⁽⁸⁾ (9.0m)	200'(60m)	8%	200'(60m)
Commercial	50 ⁽⁸⁾ (15m)	25 ⁽⁸⁾ (7.8m)	200'(60m)	8%	200'(60m)
Residential	50 ⁽⁸⁾ (15m)	25 ⁽⁸⁾ (7.8m)	100'(30m)	10%	175'(75m)

- (1) As Directed by the City Engineer.
- (2) Varies with the width of pavement.
- (3) A minimum of two through lanes required. Width will vary depending upon number of parking lanes required.
- (4) Maximum grade within 100 feet (30m) of intersection:4%
- (5) Maximum grade within 50 feet (15m) of intersection: 5%
- (6) Marginal access streets shall be classified and designed to conform with the design standards of local streets or as directed by the City Engineer.
- (7) The minimum residential width shall be 12 ft. (3.6m).
- (8) The minimum turn-around width shall be as follows:
- | | | |
|-------------|--------|---------|
| Industrial | 50.0'R | (15.2m) |
| Commercial | 42.5'R | (13.0m) |
| Residential | 37.5R | (11.5m) |
- The minimum right-of-way width for a turn-around shall be pavement radius plus 12.5 ft. (3.5m).

Any variances from these standards which do not meet the minimum design standards as established by the Board of Public Roads Classifications and Standards, must receive a waiver from the board prior to construction.



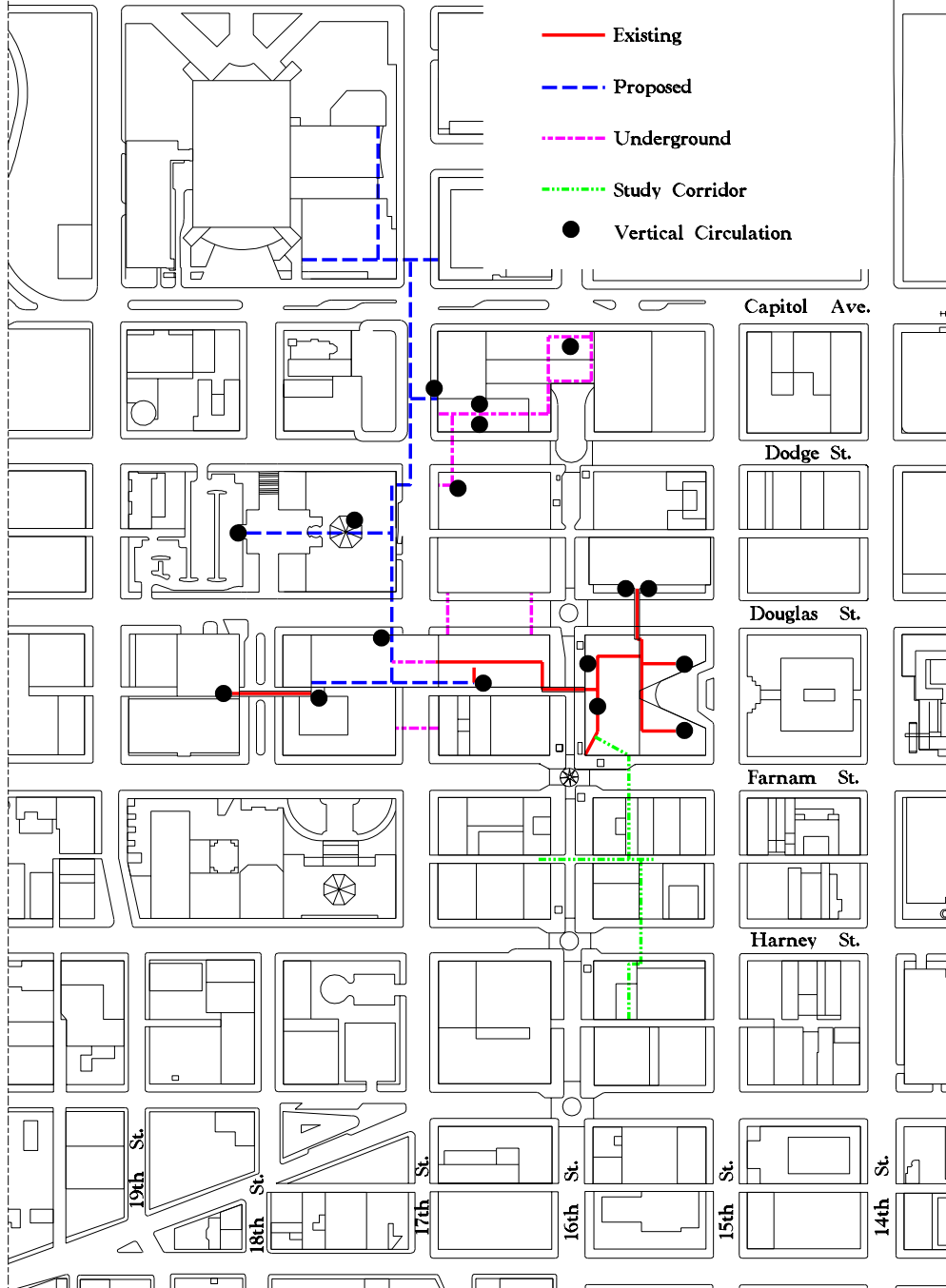


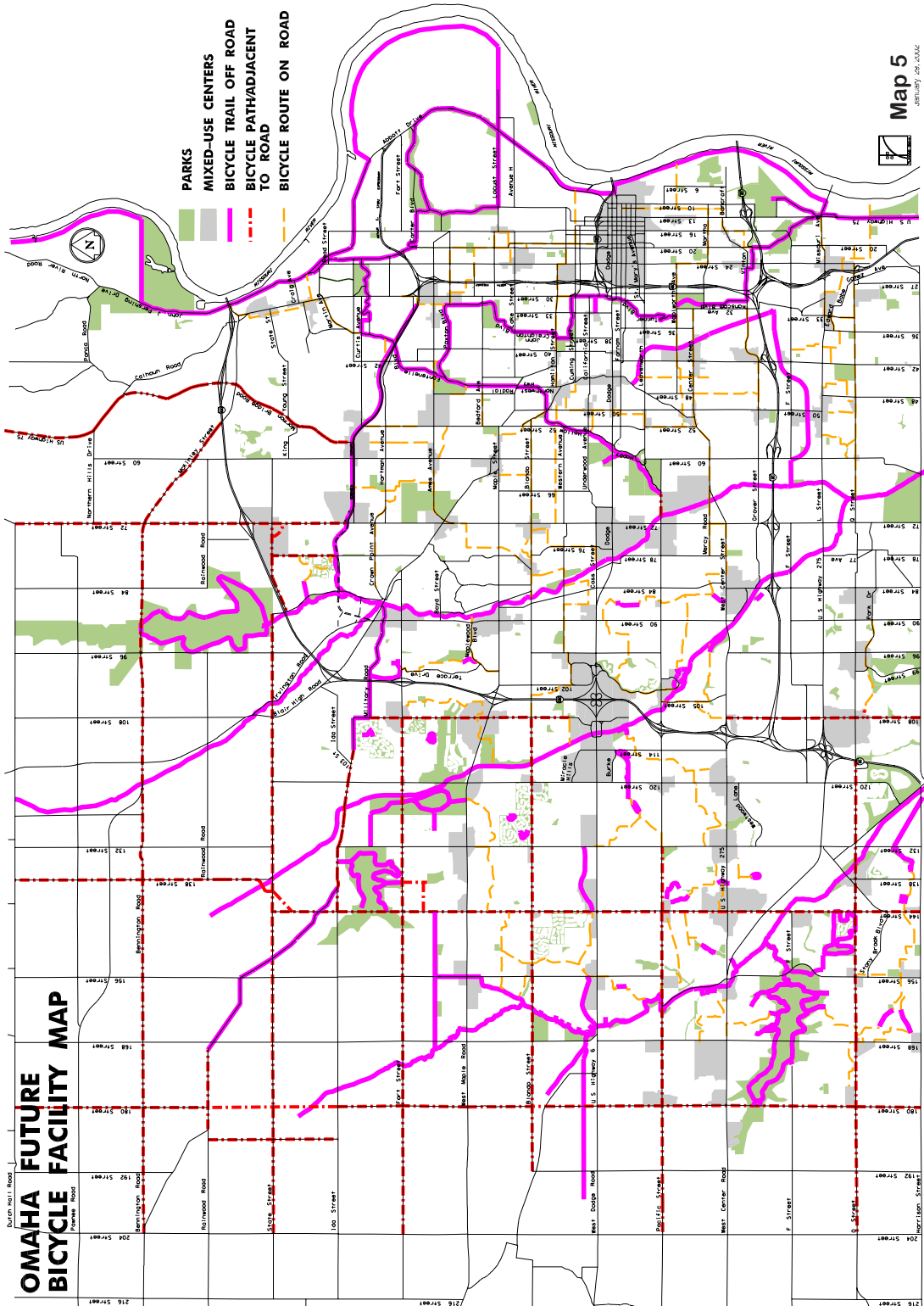


Map 3
January 26, 2002

SKYWALKS

- Existing
- Proposed
- Underground
- Study Corridor
- Vertical Circulation





OMAHA STREET RAILWAY IN 1930

