Chapter III

JURISDICTIONAL CLASSIFICATION CRITERIA

INTRODUCTION

Arterial street and highway facilities should form an integrated system over relatively large areas comprised of many local units of government. The degree of areawide importance of the individual facilities comprising the arterial system varies. Consequently, it becomes necessary to assign jurisdictional responsibility for the various existing and proposed facilities comprising the total system to the various levels and units of government involved.

The preparation of an areawide plan for the physical development of the total transportation system must necessarily precede any assignment of jurisdictional responsibility. A plan for the physical improvement of the transportation system is required to identify the existing arterial street and highway system, determine its existing deficiencies, and recommend specific additions and improvements required to serve existing and forecast traffic demands. This physical, or functional, plan for the Walworth County highway system is shown on Map 7. After such a functional transportation plan has been prepared, it becomes necessary, as the first step toward plan implementation, to specify the governmental level and unit which should have responsibility for constructing, maintaining, and operating each of the existing and proposed facilities which comprise the street and highway system. That is, the functional highway plan must be converted to a jurisdictional plan if plan implementation is to be achieved. It thus becomes necessary to develop a set of criteria which may be used as a basis for the assignment of jurisdictional responsibility for the various facilities comprising the arterial street and highway system.

PURPOSE AND OBJECTIVE OF THE CRITERIA

The purpose of the jurisdictional classification criteria is to provide an objective and rational basis for the assignment of jurisdictional responsibility to the various levels of government concerned for the various segments of the existing and proposed arterial street and highway system. The objective of the recommended
criteria is to identify subsystems within the arterial street and highway system which are integral parts of the overall system, and which are continuous within themselves or in conjunction with other "higher" subsystems, but which vary with respect to the types of trips served, the degree of traffic mobility provided, and the types of land use areas served.

**ARTERIAL SUBCLASSIFICATION**

Three levels of government—state, county, and local (municipal)—have jurisdictional responsibility for the planning, design, construction, operation, and maintenance of highway facilities within Walworth County. Therefore, all segments of the arterial street and highway system (existing and proposed) should be classified into one of three categories: state trunk, county trunk, and local trunk.

**State Trunk Arterials**

State trunk arterials should include all routes of statewide and regionwide importance within the urban or rural areas of the county. These state trunk arterials are intended to connect land uses of statewide and regionwide significance and provide the highest level of traffic mobility, that is, the highest speeds and lowest degree of land access service. These state trunk arterials should have regional or interregional system continuity. These state trunk arterials should serve the longest trips made in Walworth County, particularly trips through Walworth County and between Walworth County and other counties.

**County Trunk Arterials**

County trunk arterials should include all those routes which are intended to serve land uses of countywide importance and provide an intermediate level of traffic mobility, an intermediate level of land access service, and intercommunity system continuity. These county trunk arterials should in particular serve travel between the communities of Walworth County.

**Local Trunk Arterials**

Local trunk arterials should include all those routes within the county which are intended to provide the lowest level of arterial traffic mobility, the highest degree of arterial land access service, and intracommunity system continuity. These local trunk arterials are intended to serve predominately travel within the communities of Walworth County.
CRITERIA

Criteria for the jurisdictional classification of the arterial street and highway system can be developed from three basic characteristics of the arterial facilities: 1) the trips served, 2) the land uses served, and 3) the operational characteristics of the facilities themselves.

Trip Service Criteria
Trip length on each segment of arterial street and highway was recommended as the criteria for jurisdictional classification of arterials with respect to the type of trips served. Figure 1 presents a curve plotted to provide a graphical representation of the relationship between the arterial street segment average trip lengths and cumulative arterial system mileage. Break points were identified on the curve and used to select trip length ranges representative of each jurisdictional classification type: state, county, and local. The break points identified the trip length ranges which should be served by each facility type, and marked the points beyond which a relatively high increase in facility type mileage would accommodate only a relatively small increase in trip length range. The year 2035 average trip length ranges recommended as criteria for arterial classification are presented in Table 5.

Land Use Service Criteria
Land use service criteria for the jurisdictional classification of arterials was recommended to consider the land use activities to be connected and served by the various jurisdictional classifications. For the purpose of such criteria, the term "connect and serve" was defined as follows:

- A state trunk arterial facility was considered to "connect and serve" given land uses when direct access from the facility to roads serving the land use area was available within a maximum over-the-road distance of one mile from the main vehicular entrance to the land use to be served.

- A county trunk arterial facility was considered to "connect and serve" given land uses when direct access from the facility to roads serving the land use area was available within a maximum over-the-road distance of one-half mile of the main vehicular entrance to the land use to be served.

- A local trunk arterial facility was considered to "connect and serve" given land uses when direct access from the facility to roads serving the land use area was available within a maximum over-the-road distance of one-quarter mile of the main vehicular entrance to the land use to be served.

The land use activities to be considered as properly influencing jurisdictional classification of arterial highway
Figure 1

RELATIONSHIP BETWEEN AVERAGE TRIP LENGTH AND CUMULATIVE ARTERIAL MILES
WALWORTH COUNTY ARTERIAL STREET AND HIGHWAY SYSTEM: 2035

Source: SEWRPC.
Table 5

AVERAGE TRIP LENGTH CRITERIA FOR JURISDICTIONAL CLASSIFICATION

<table>
<thead>
<tr>
<th>Arterial Type</th>
<th>Average Trip Length (Miles)</th>
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</thead>
<tbody>
<tr>
<td>State Trunk</td>
<td>30.00 or More</td>
</tr>
<tr>
<td>County Trunk</td>
<td>17.00 to 29.99</td>
</tr>
<tr>
<td>Local Trunk</td>
<td>Less than 17.00</td>
</tr>
</tbody>
</table>

Source: SEWRPC.
systems should be those which, either through their individual or aggregate effects, interact strongly with the need for transportation facilities and which, by their nature, are normally grouped into concentrations which form major traffic generators. These include major transportation centers, major outdoor recreation centers, major economic activity centers, and major governmental and institutional centers. The following criteria with respect to each of these land use classifications were recommended for the Walworth County jurisdictional highway planning study.

1. Transportation Terminals
   a. **State Trunk Arterials** – State trunk arterial facilities should connect and serve intercity passenger rail, intercity passenger bus, and major truck terminals;¹ and commercial seaports and airports.²
   b. **County Trunk Arterials** – County trunk arterial facilities should connect and serve freeway interchanges, general-aviation airports,³ pipeline terminals, and rapid transit stations and park-ride lots not served by state trunk arterials.
   c. **Local Trunk Arterials** – Local trunk arterial facilities should connect and serve rapid transit stations and park-ride lots not served by state trunk and county trunk arterials.

2. Outdoor Recreation Centers
   a. **State Trunk Arterials** – State trunk arterial facilities should connect and serve all state parks and those public and private recreational facilities of interregional and statewide importance with a gross site area of 250 acres or more.
   b. **County Trunk Arterials** – County trunk arterial facilities should connect and serve those public and private recreational facilities of regional and countywide importance with a gross site area between 100 and 250 acres and county fairgrounds not served by state trunk arterials.

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¹A major interregional truck terminal is herein defined as a complex of contiguous, concentrated land uses generating 250 or more interregional truck trips per average weekday.

²A commercial airport is herein defined as a public airport intended to serve primarily commercial local service and air-carrier aircraft providing service to the general public on a regularly scheduled basis between major cities of the country.

³A general-aviation airport is herein defined as a publicly owned and operated airport or private airport open to public use and recommended to remain in operation under the regional airport system plan.
c. **Local Trunk Arterial** – Local trunk arterial facilities should connect and serve community parks\(^4\) with a gross site area between 25 and 100 acres not served by state trunk and county trunk arterials.

3. **Economic Activity Centers**
   a. **State Trunk Arterials** – State trunk arterial facilities should connect and serve major economic activity centers.\(^5\)

   b. **County Trunk Arterials** – County trunk arterial facilities should connect and serve sub-regional general purpose centers,\(^6\) sub-regional retail\(^7\) and community retail centers,\(^8\) sub-regional office centers,\(^9\) and sub-regional industrial centers\(^10\) not served by state trunk arterials.

   c. **Local Trunk Arterials** – Local trunk arterial facilities should connect and serve neighborhood...
retail\textsuperscript{11} and "village" retail\textsuperscript{12} centers and minor community industrial centers\textsuperscript{13} not served by state trunk and county trunk arterials.

4. Governmental and Institutional Centers
   a. State Trunk Arterials – State trunk arterial facilities should connect and serve major universities/colleges\textsuperscript{14}, technical colleges, medical complexes\textsuperscript{15}, and major cultural centers.
   b. County Trunk Arterials – County trunk arterial facilities should connect and serve colleges\textsuperscript{16} and community hospitals\textsuperscript{17}, county courthouses, county office complexes, and State and Federal buildings not served by state trunk arterials.
   c. Local Trunk Arterials – Local trunk arterial facilities should connect and serve city and village halls, high schools, and municipal complexes not served by state trunk and county trunk arterials.

Criteria Relating to Operational Characteristics
Criteria for the jurisdictional classification of arterials relating to operational characteristics are recommended to include consideration of system continuity, facility spacing, traffic volume, traffic mobility, and land access.

\textsuperscript{11} A neighborhood retail and service center is herein defined as an existing or officially designated concentration of retail uses having a gross site area ranging from five to 15 acres, serving 4,000 to 10,000 persons, serving one or portions of several residential neighborhoods, and includes a small grocery store (less than 40,000 square feet) or a large drug store/variety store (greater than 8,000 square feet) along with other businesses, such as a beauty parlor or laundromat.

\textsuperscript{12} A “village” retail and service center is herein defined as an existing or officially designate concentration of retail and service uses having a gross site area ranging from five to 15 acres and includes clusters of smaller retail and service establishments that comprise long-standing “village” commercial centers.

\textsuperscript{13} A minor community industrial center is herein defined as an existing or designated concentration of manufacturing, wholesaling, and related use establishments ranging from 20 to 100 acres or providing employment for 300 to 1,500 persons.

\textsuperscript{14} A major university/college is herein defined as a university or college with an enrollment of 4,500 or more students.

\textsuperscript{15} A medical complex is herein defined as a medical center or hospital with 600 or more inpatient beds.

\textsuperscript{16} A college is herein defined as a college with an enrollment of less than 4,500 students.

\textsuperscript{17} A community hospital is herein defined as a hospital with less than 600 inpatient beds.
System Continuity

The various arterial subsystems should form integrated systems within themselves or in conjunction with the other subsystems. The individual facilities comprising any given subsystem should be directly routed so as to provide the shortest travel paths practicable through the arterial network. The following criteria, with respect to system continuity, were recommended for the Walworth County jurisdictional highway planning study:

1. **State Trunk Arterials** – State trunk arterial facilities should have interregional or regional continuity comprising total systems at the regional and state level.

2. **County Trunk Arterials** – County trunk arterial facilities should have intermunicipality and intercounty continuity comprising integrated systems at the county level.

3. **Local Trunk Arterials** – Local trunk arterial facilities should have intracommunity continuity comprising an integrated system at the town, city, or village level.

Spacing

The location and geometric configuration of highway systems must be properly related to the land uses to be served and should be determined from areawide traffic analyses which consider both existing and probable future traffic loadings derived from existing and proposed land use patterns. Nevertheless, some general criteria may be established with respect to the minimum spacing of various types of facilities based upon good land use planning principles, as well as operational characteristics and engineering constraints. The following criteria, with respect to minimum spacing, were recommended for the Walworth County jurisdictional highway planning study.

1. **State Trunk Arterials** – State trunk arterial facilities should generally be located no closer than two miles to, and approximately parallel with, another state trunk facility.

2. **County Trunk Arterials** – County trunk arterial facilities should generally be located no closer than one mile to, and approximately parallel with, a state trunk facility or another county trunk facility.

3. **Local Trunk Arterial** – Local trunk arterial facilities should generally be located no closer than one-half mile to, and approximately parallel with, a state trunk, county trunk, or another local trunk facility.

The year 2035 regional transportation plan recommends arterial spacing of one-half mile in high density urban areas, one mile in medium density urban areas, two miles in low density urban and sub-urban areas, and more
than two miles in rural areas.

**Volume**

Although traffic volume alone provides little indication of the function of an arterial facility, it can, in conjunction with other criteria, be an important functional and jurisdictional criterion. Table 6 summarizes the criteria with respect to future design year 2035 traffic volume recommended for the Walworth County jurisdictional highway planning study. Figure 2 presents a curve plotted to provide a graphical representation of the relationship between traffic volume and cumulative arterial system mileage. Break points were identified on the curve and used to select traffic volume ranges representative of each jurisdictional classification type.

**Traffic Mobility**

Traffic mobility criteria should consider that the longer the trip the more critical the time of travel, and generally require higher speeds on the routes of highest arterial function. The criteria with respect to traffic mobility shown in Table 7 were recommended for the Walworth County jurisdictional highway planning study.

**Land Access**

Two of the basic functions performed by street systems—traffic mobility and land access—are inherently conflicting. The land access function of arterial facilities should be subordinate to the traffic mobility function. The degree of access control on an arterial facility should be considered in the jurisdictional classification of the arterial facility. The following criteria with respect to land access control were recommended for the Walworth County jurisdictional highway planning study:

1. **State Trunk Arterials** – All state trunk arterials should have full or partial control of access.\(^{18,19}\)

2. **County Trunk Arterials** – All county trunk arterials should have at least partial control of access.\(^{20}\)

\(^{18}\) Full control of access is herein defined as the control of access so as to give preference to the movement of through traffic by providing access connections only at selected public roads via grade-separated interchanges.

\(^{19}\) Partial control of access is herein defined as the control of access so as to give preference to the movement of through traffic to a degree that, in addition to access connections at selected public roads, there may be some direct access to abutting land uses, with generally one point of reasonably direct access to each parcel of abutting land as the parcels existed at the time of an official declaration that partial control of access shall be exercised.

\(^{20}\) See definition of partial control of access as stated in footnote 19.
Table 6

AVERAGE WEEKDAY TRAFFIC VOLUME CRITERIA FOR JURISDICTIONAL CLASSIFICATION

<table>
<thead>
<tr>
<th>Arterial Type</th>
<th>Average Weekday Traffic Volume (Vehicles)</th>
</tr>
</thead>
<tbody>
<tr>
<td>State Trunk</td>
<td>7,000 or More</td>
</tr>
<tr>
<td>County Trunk</td>
<td>2,500 to 6,999</td>
</tr>
<tr>
<td>Local Trunk</td>
<td>Less than 2,500</td>
</tr>
</tbody>
</table>

Source: SEWRPC.
Figure 2

RELATIONSHIP BETWEEN AVERAGE WEEKDAY TRIP VOLUME AND CUMULATIVE ARTERIAL MILES ON THE WALWORTH COUNTY ARTERIAL STREET AND HIGHWAY SYSTEM: 2035

Source: SEWRPC.
Table 7
TRAFFIC MOBILITY CRITERIA
FOR JURISDICTIONAL CLASSIFICATION

<table>
<thead>
<tr>
<th>Arterial Type</th>
<th>Posted Speed Limit (Miles per Hour)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Urban</td>
</tr>
<tr>
<td>State Trunk</td>
<td>35 to 65</td>
</tr>
<tr>
<td>County Trunk</td>
<td>30 to 55</td>
</tr>
<tr>
<td>Local Trunk</td>
<td>25 to 40</td>
</tr>
</tbody>
</table>

Source: SEWRPC.
3. **Local Trunk Arterials** – All local trunk arterials should have at least minimum control of access.\(^{21}\)

Table 8 summarizes the functional criteria recommended for the jurisdictional classification of arterial highways in Walworth County.

**OTHER FACTORS**

In the application of the foregoing criteria to the delineation of a jurisdictional highway system or presented in Chapter IV, several other factors must be considered, including legal constraints, financial constraints, and boundary line facility coordination. Other factors may include the extent of heavy truck traffic from industry, mineral extraction operations, or truck terminals.

**STATE STATUTES GOVERNING JURISDICTIONAL TRANSFERS**

The *Wisconsin State Statutes* identify the requirements for the jurisdictional transfer of streets and highways in the State of Wisconsin. Chapters 83, —County Highways,” and Chapter 84, —State Trunk Highways, Federal Aid,” of the *Wisconsin State Statutes* contain the specific language regarding the jurisdictional transfer of streets and highways between the State, county, and municipal levels of government.

Based upon a review of the *Wisconsin State Statutes* governing the jurisdictional transfer of streets and highways in Wisconsin, with one exception, a governmental entity cannot unilaterally transfer (add or delete) an existing road, street, or highway to another governmental entity’s jurisdiction. The jurisdictional transfer process identified in the *Wisconsin State Statutes* generally requires the following:

- Jurisdictional transfers between the Wisconsin Department of Transportation and a county requires the approval of both the Wisconsin Department of Transportation and the county board;

- Jurisdictional transfers between the Wisconsin Department of Transportation and a city, village and/or town requires the approval of both the Wisconsin Department of Transportation and the governing body of any affected cities, villages, and/or towns; and

- Jurisdictional transfers between the county and a city, village, and/or town requires the approval of the

\(^{21}\) Minimum control of access is herein defined as the regulation of the placement and geometry of direct access roadway connections as necessary for safety.
## SUMMARY OF FUNCTIONAL CRITERIA FOR JURISDICTIONAL CLASSIFICATION OF ARTERIAL STREETS AND HIGHWAYS IN WALWORTH COUNTY

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Arterial Type</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>State Trunk</td>
</tr>
<tr>
<td></td>
<td>County Trunk</td>
</tr>
<tr>
<td></td>
<td>Local Trunk</td>
</tr>
<tr>
<td>Trip Service Average Trip Length (Miles)</td>
<td>30.0 or More</td>
</tr>
<tr>
<td>Transportation Terminals</td>
<td>Connect and serve intercity rail, intercity bus, and major truck terminals and commercial seaports and airports.</td>
</tr>
<tr>
<td>Recreational Facilities</td>
<td>Connect and serve public parks having a gross site area of 250 acres or more, special use sites, and nature study sites.</td>
</tr>
<tr>
<td>Economic Activity Centers</td>
<td>Connect and serve regional general employment centers with at least 3,500 total jobs, regional retail centers with at least 2,000 retail jobs, regional office centers with at least 3,500 office jobs, and regional industrial centers with at least 3,500 industrial jobs.</td>
</tr>
<tr>
<td>Institutional Centers</td>
<td>Connect and serve the medical complexes with 600 or more inpatient beds, major universities/colleges, technical colleges, and major cultural centers.</td>
</tr>
<tr>
<td>Criteria</td>
<td>Arterial Type</td>
</tr>
<tr>
<td>---------------------</td>
<td>-------------------------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>State Trunk</td>
</tr>
<tr>
<td>System Continuity</td>
<td>Interregional or regional continuity comprising total systems at the regional and state level.</td>
</tr>
<tr>
<td>Spacing</td>
<td>Minimum 2 miles.</td>
</tr>
<tr>
<td>Volume</td>
<td>Minimum 7,000 vehicles per average weekday.</td>
</tr>
<tr>
<td>Traffic Mobility</td>
<td>Urban Posted speed limit 35 to 65 miles per hour.</td>
</tr>
<tr>
<td></td>
<td>Rural Posted speed limit 50 to 65 miles per hour.</td>
</tr>
<tr>
<td>Land Access Control</td>
<td>Full or partial control of access.</td>
</tr>
</tbody>
</table>

Source: SEWRPC.

* Arterial facilities are considered to “connect and serve” given land uses when direct access from the facility to roads serving the land use area is available within the following maximum over-the-road distances from the main vehicular entrance to the land use to be served: one mile for state trunk facilities, one-half mile for county trunk facilities, and one-quarter mile for local trunk facilities.
county board, the governing body of any affected cities, villages, and/or towns, and the Wisconsin Department of Transportation.

The exception where the above jurisdictional transfer process need not be followed is as follows:

- A city or village may, by resolution, remove from the county trunk highway system that portion of a county trunk highway which is situated wholly within the city or village municipal boundaries.

**SUMMARY**

For planning purposes, street and highway systems are divided into functional subsystems—arterial, collector, or local access—according to the primary type of service individual facilities provide. Such a classification is essential to sound transportation planning because it identifies the primary function which a particular facility should serve, as well as providing a means for defining travel routes for movement through the total system. Jurisdictional classification criteria are intended to provide an objective and rational basis for the assignment of jurisdictional responsibility for various segments of the existing and proposed arterial street and highway system to the various government levels concerned. The state, county, and local levels of government have direct jurisdictional responsibility for the planning, design, construction, operation, and maintenance of street and highway facilities in Walworth County.

All segments of the total (existing and proposed) arterial street and highway system in Walworth County are proposed to be classified into one of three categories: state trunk; county trunk; and local trunk. The criteria to guide this classification include land uses served, and the operational characteristics of the facilities themselves. Trip length ranges which should be served by each facility type were delineated under the trip service criteria. Land use activities to be connected and served by the various arterial subclassifications were recommended under the land use service criteria including, transportation centers, outdoor recreation centers, economic activity centers, and governmental and institutional centers. Criteria relating to operational characteristics were recommended to include consideration of system continuity, facility spacing, traffic volume, traffic mobility, and land access.

In general, state trunk arterials should serve routes of statewide and regionwide importance within the urban or rural areas of the county. These state trunk arterials are intended to connect land uses of statewide and regionwide significance and provide the highest level of traffic mobility, that is, the highest speeds and lowest degree of land access service. These state trunk arterials should have regional or interregional system continuity. These state trunk arterials should serve the longest trips made in Walworth County, particularly
trips through Walworth County and between Walworth County and other counties.

County trunk arterials should include all those routes which are intended to serve land uses of countywide importance and provide an intermediate level of traffic mobility, an intermediate level of land access service, and intercommunity system continuity. These county trunk arterials should in particular serve travel between the communities of Walworth County.

Local trunk arterials should include all those routes within the county which are intended to provide the lowest level of arterial traffic mobility, the highest degree of arterial land access service, and intracommunity system continuity. These local trunk arterials are intended to serve predominately travel within the communities of Walworth County.