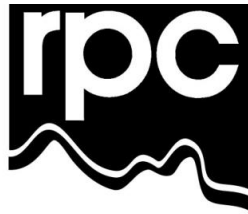


# Thoroughfare Plan

**FOR HAMILTON COUNTY, OHIO**



HAMILTON COUNTY

Regional  
Planning  
Commission

Hamilton County Regional Planning Commission

Effective: March 17, 2017

## Forward

The purpose of the 2017 edition of the Thoroughfare Plan is to update the roadway functional classification system and create provisions for flexibility within the right-of-way (ROW) dedication process. This edition will also be used to clarify the process for amending and updating the plan.

## **COMMUNITY OFFICIALS AND REPRESENTATIVES**

In June of 2015, staff from the Hamilton County Regional Planning Commission convened stakeholders to help guide the development of this Thoroughfare Plan. Stakeholders represented transportation experts and engineers, planning and development officials and builders and developers. Although the focus was on the unincorporated areas of the county, representatives from the City of Cincinnati and Hamilton County Municipal League participated in this process.

### **Transportation Officials**

Ted Hubbard, Hamilton County Engineer  
Eric Beck, Hamilton County Engineer's Office  
Andy Fluegemann, Ohio Department of Transportation (ODOT)  
Bob Koehler, OKI Regional Council of Governments  
Jim Coppock, City of Cincinnati

### **Government Officials**

Steve Sievers, Anderson Township  
Michael Lemon, Columbia Township  
Catherine Feerick, Delhi Township  
Adam Goetzman, Green Township  
Bob Polewski, Miami Township  
Chris Gilbert, Springfield Township  
Greg Bickford, Sycamore Township  
Stiney Vonderhaar, Municipal League  
Martha Kelly, City of Cincinnati

### **Development Representatives**

Andy Bucher, Western Economic Council Representative  
Craig Abercrombie, Ohio Valley Development Council Representative

### **Hamilton County Regional Planning Commission Staff**

Todd Kinskey, Director, Planning + Development  
Bryan Snyder, Development Services Administrator  
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Brian Wamsley, Senior Planner  
Stacey Todd, Associate Planner  
Samuel Schroeder, Intern

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## OVERVIEW

A Thoroughfare Plan is a long-range plan that identifies the location and type of roadway facilities that are needed to meet community goals related to roadways. The Thoroughfare Plan is not a list of construction projects but rather serves as a tool to enable the transportation system to meet community needs for mobility, economic development and urban design.

It is important to recognize policies linked to the impact of land use on transportation must be consistent with other county goals. Improved mobility and economic development are not the only goals of this plan. Other goals to be considered include maintaining high quality of life, preserving historic and natural resources and accommodating multimodal forms of transportation.

### Legal Authority

The Hamilton County Regional Planning Commission was established in 1929 under authority of Revised Code section 713.21. Pursuant to Ohio law, the Commission has the power to adopt a plan for major streets and highways of the County (a thoroughfare plan) and the duty to regulate the subdivision of lands within the unincorporated portions of the County. ORC 713.23, 711.10.

### History of the Thoroughfare Plan

Hamilton County has a long history of preparing transportation and roadway plans. Most recently, the Hamilton County Board of County Commissioners approved the Hamilton County *Transportation Policy Plan* on March 3, 2010. The development of a Thoroughfare Plan begins to meet a primary recommendation from the Policy Plan – to develop a coordinated countywide multi-modal Strategic Transportation Plan.

The Hamilton County *Transportation Policy Plan* is the latest of several transportation planning efforts for the County:

- 1948 - *Metropolitan Master Plan* – City of Cincinnati Planning Commission
- 1964 - A Motorway Plan was proposed as part of the Regional Planning Commission's *Master Plan for Hamilton County, Ohio* (Harland Bartholomew and Associates, 1964).
- 1993 - *Thoroughfare Plan Update* (Woolpert Consultants). This traditional thoroughfare plan included a detailed assessment of existing roadways and demographic projections to determine needed future roadway infrastructure. It was never formally adopted. Much of the document is still pertinent today and was referenced for this edition of the Thoroughfare Plan.
- 1994 - Thoroughfare Plan map adopted
- 1999 (amended 2000, 2002) - *Western Hamilton County Collaborative Plan* – a comprehensive plan with a transportation element for the western third of the County
- 2004 - *Community Compass* Report No. 16-12 State of the County Report: Mobility and corresponding Transportation Concept Plan

### Associated Regulations

The Thoroughfare Plan is designed to work in concert with other related regulations including zoning, subdivision and access management.

*Zoning Resolution for the Unincorporated Territory of Hamilton County, Ohio* (Zoning Resolution) and individual township zoning resolutions, where applicable, reference right of way dedication in accordance with the Thoroughfare Plan.

<http://building.hamiltoncountyohio.gov/sites/default/files/zoning/HCZonRes.pdf>

*The Rules and Regulations for Subdivision of the Regional Planning Commission for Plats and Subdivision for Plats and Subdivision of Land within the Unincorporated Territory of Hamilton County* (Subdivision Regulations) generally states that existing and proposed public improvements shall conform and be properly related to the Thoroughfare Plan (in the Subdivision Regulations sometimes referred to as Motorway Plan).

<http://building.hamiltoncountyohio.gov/sites/default/files/SubRegs.pdf>

*Access Management Regulations within the unincorporated areas of Hamilton County* (Access Management Regulations). All aspects of the Thoroughfare Plan shall be in accordance with the regulations as described in the Access Management Regulations document on file at the Hamilton County Engineer's Office.

<http://www.hamiltoncountyohio.gov/Engineer/AccessManag/AccessManagementComplete.pdf> .

In any cases of conflict between this Thoroughfare Plan and the Access Management Regulations, the latest provisions in the Access Management Regulations shall prevail.

### **Access and Distribution of Plan**

The Thoroughfare Plan includes not only this document but also an associated map. The text in this document outlines how the Thoroughfare Plan will be administered while the map depicts the Thoroughfare Plan's applicability to specific roads.

Given the advances in mapping, the Thoroughfare Plan map will be made accessible as an interactive digital map that will be a layer on the CAGIS online webpage and will also be available in digital format. This will provide the ability to pan and zoom in for more detailed information.

# ROADWAY FUNCTIONAL CLASSIFICATION

## General

The Functional Classification System is a method of classifying streets and highways based on their general characteristics. This classification system has been used over the years to establish a systematic method of categorizing the range of facilities that make up the overall highway network. Historically, one of the most important and common uses of this system has been to identify streets and highways eligible for certain types of funding.

The Functional Classification System groups streets and highways in a hierarchy based on the type of highway service they provide. The Highway Functional Classification - Concepts, Criteria and Procedures Manual, published by FHWA, basically established the current system in 1974. The different functional systems are defined in that manual, and general concepts and characteristics used to identify each are presented, as well as the procedure to follow in designating a system. In general, highways can be categorized as arterials, collectors or locals. However, depending on whether the route is considered urban or rural, the classifications are also broken down into smaller categories, e.g., rural principal arterial, rural minor arterial, rural major collectors and urban collectors (ODOT Traffic Engineering Manual 2002 – July 15, 2015 update)

## Thoroughfare Plan Context

In order to make recommendations for Hamilton County's thoroughfare network, it is first necessary to classify various thoroughfares and streets by function in terms of trip length and purpose, access, and location. Once this functional classification has been accomplished, minimum design standards can be specified for each functional type as guidelines for the construction of new streets and for upgrading the existing street network.

Functional classification is a vital element of this Thoroughfare Plan because it informs the Right-of-Way (ROW) Dedication and Context Sensitive Design sections of the document.

## Access Management Regulations Functional Classification

The Access Management Regulations outline a Road Classification system: a hierarchical system of roadways, classified by function, used to determine the appropriate level of access management. The functional classification of roadways is a system whereby roads are described in terms of their usage. Generally, roads provide two functions. The first is mobility, providing people the ability to go from one place to another. The second is the provision of access to abutting properties.

Higher-classification roadways, arterial in nature, require more stringent access management methods in order to protect their primary role of providing mobility by carrying traffic. The Lowest classification, local streets, have the primary role of providing access to abutting properties. As one road function increases, the other necessarily decreases.

- a. **Freeway.** The highest type arterial highway, always divided, designed for relatively uninterrupted, high-volume mobility between cities and other major areas with full control of

abutting land access and utilizing grade separations (interchanges) as limited points for access. “Access management” for a freeway is related to the number and spacing of interchanges. Proposals for additional interchanges on freeway are subject to exhaustive study, termed an interchange justification study, to assure that capacity is not degraded. (recommended right-of-way width 120-160 feet)

- b. **Expressway.** The next-highest arterial highway, normally divided, also designed for relatively uninterrupted, high-volume mobility between areas, with full or partial control of access and mixture of intersections (at grade) and interchanges (grade-separated). Trip lengths and volumes on expressways are generally less than on freeways. A local example of an expressway with full control of abutting access is U.S. 27 from Struble Road to beyond S.R. 128 in Butler County. (recommended right-of-way width 120-160 feet)
- c. **Major Arterial.** Arterials are intended to provide a greater degree of mobility rather than land access; consequently, it is important that access points be minimized. A major arterial is a roadway that is of regional importance and is intended to serve high volumes of traffic traveling relatively long distances within and even beyond the county. It may connect urban centers with one another and/or with outlying communities and employment or shopping centers. A major arterial is intended primarily to serve through traffic, and access should be controlled. Winton Road and part of Harrison Avenue are examples of this category. (recommended right-of-way width 120 feet)
- d. **Minor Arterial.** A roadway, also serving through traffic, that is similar in function to a major arterial, but operates with lower traffic volumes, serves trips of shorter distances (but still greater than one mile), and may provide a higher degree of property access than do major arterials. Examples of this category are Pippin Road and Westwood-Northern Boulevard. (recommended right-of-way width 100 feet)
- e. **Major Collector.** A roadway that provides for traffic movement between local roads/streets and arterials or community-wide activity centers. Major collectors may also provide direct access to abutting properties, such as regional shopping centers, large industrial parks, major subdivisions and community-wide recreational facilities, but typically not individual residences. Most major collectors are also county roads and are therefore through streets. Asbury Road and Werk Road are examples of this category. (recommended right-of-way width 80 feet)
- f. **Minor Collector.** A roadway similar in function to a major collector but which carries lower traffic volumes over shorter distances and has higher degree of property access. Minor collectors may serve as main circulation streets within large, residential neighborhoods. Most minor collectors are also township roads and streets may, or may not, be through streets. (recommended right-of-way width 80 feet)
- g. **Local.** A roadway that is primarily intended to provide access to abutting properties. It tends to accommodate lower traffic volumes, serves short trips (generally within neighborhoods), and provides connections preferably only to collector streets rather than arterials. (right-of-way governed by the subdivision regulations)

Although not classified in the Access Management Regulations, the county does have several alleys that could be included in a functional classification list.



### **OKI Functional Classification**

Another important road classification system to note is that of the federally designated OKI Functional Classification map. This map may differ from the Hamilton County designations because the OKI Classification map is limited as to the number of miles classified in the federal system. The OKI map also makes a differentiation between urban and rural parts of the system.

<https://www.dot.state.oh.us/Divisions/Planning/ProgramManagement/MajorPrograms/Functional%20Class%20by%20County/Hamilton%20FC.pdf>

## CONTEXT SENSITIVE DESIGN

The urban thoroughfare is a complicated environment, where the needs of pedestrians, bicyclists, transit users, and street-side activities must be considered along with those of trucks, buses, and emergency response vehicles and general purpose traffic. Context sensitive urban thoroughfare design requires evaluating the needs of the users of the facility in a manner that considers mobility and safety in combination with local objectives for urban activity, economic development, and character. The selection of appropriate design criteria is vital to providing suitable design of the facility.

As the primary purpose of the Thoroughfare Plan is to determine the required ROW for future transportation needs, it is important to know how other elements of urban design will be incorporated into the ROW or adjacent to the ROW. The most common concerns for flexibility in thoroughfare planning are the incorporation of landscaping, sidewalks, and bicycles.

FHWA's Livability in Transportation Guidebook (2010) cautions that functional classification based designs may not be responsive to context. The report notes the traditional association of functional classification with the movement of vehicles, but it also identifies the historical lack of recognition regarding the influence of land use density and mix on the feasibility and desirability of walking, as well as the influence of land use density and mix on setting operating speeds that are appropriate for the level of pedestrian activity present. The report describes corridor re-design initiatives that have preserved mobility for vehicles and enhanced access for travel by foot, bicycle or transit. (Highway Functional Classification: Concepts, Criteria and Procedures, 2013 Edition, FHWA)

FHWA recommends referencing the *Smart Transportation Guidebook* (New Jersey Department of Transportation {NJDOT} and the Pennsylvania Department of Transportation {PennDOT 2008}) for guidance regarding functional classification and land use context. Grounded in the AASHTO Green Book (2001) and ITE *Context Sensitive Solutions in Designing Major Urban Thoroughfares for Walkable Communities* (2006), the *Smart Transportation Guidebook* recommends design values for right-of-way cross section elements.

Local jurisdictions are empowered to use the appropriate design values for the desired land use context and roadway types to assemble the right-of-way width that meets both their land use and transportation visions. A comprehensive or corridor planning process should be the basis for designing the proposed cross sections. Specific road sections may be approved by the County Engineer and/or ODOT in cases where the Hamilton County Regional Planning Commission has adopted a sub-area plan for a distinct geographic area that has been prepared in conjunction with the County Engineer and approved by the elected legislative body of the jurisdiction in question. Such sub-area plans should be developed by a professional engineer using accepted design standards such as AASHTO's A Policy on Geometric Design of Highways and Streets (Green Book, 2011 edition). Local funding of improvements not mandated by ORC is another consideration that the County Engineer will take into account before approval.

## **RIGHT OF WAY DEDICATIONS**

Implementation of the Thoroughfare Plan is achieved through the dedication of right-of-way as part of the development process. Where sites are undergoing new development or redevelopment and the intensity of the use increases, either through new subdivision construction or zoning map amendments that include planned district approval, compliance with the Thoroughfare Plan will be required to accommodate additional traffic volume generated by the development. In addition to complying with the Access Management Regulations, where applicable, the property owner must also dedicate in fee the right-of-way width recommended by the Thoroughfare Plan Map.

Dedication is specifically required as part of all major subdivisions (6 or more lots) and is achieved through the recording process for the subdivision Record Plat. Dedication is accomplished in accordance with the procedures of the County Engineer's office and is assured by the County Subdivision Administrator. Additionally, all zone map amendments for planned districts require dedication of right-of-way per the width required by the Thoroughfare Plan Map. The dedicated area must be noted on the approved development plan and be recorded prior to the issuance of any Final Occupancy Certificate for the subject site. In this case, dedication is assured by the County or Township Zoning Inspector.

Strict compliance with the Thoroughfare Plan recommended right-of-way width may be modified only in the following cases:

1. In cases where the Hamilton County Regional Planning Commission has adopted a sub-area plan for a distinct geographic area that has been prepared in conjunction with the County Engineer and/or ODOT and approved by the elected legislative body of the jurisdiction in question.
2. In cases where the County Engineer determines that the required dedication would be impractical or serve no meaningful purpose after submittal of a traffic impact study or other related studies required by the County Engineer.
3. In cases where the County Engineer and the local jurisdiction have an agreement, plan, or joint project where widening of the road in question would no longer be necessary (i.e. construction of a bypass, road improvements on nearby roads, etc.)

The dedication of right-of-way shall not be modified in the following cases:

1. Where right-of-way is needed for utility improvements.
2. Where right-of-way is necessary to meet current design standards and traffic demands.
3. Where existing right-of-way is located within an existing roadway easement that would be dedicated in fee as part of the required dedication process.

Applications to modify the right-of-way dedication width will be reviewed by the County Engineer who will submit a recommendation to the Regional Planning Commission. The Regional Planning Commission will consider the County Engineer's report at its next meeting and make a decision on granting the modification.

## **ADOPTION AND AMENDMENT PROCESS**

The formal procedure for adopting or amending the *Hamilton County Thoroughfare Plan* is as follows. First, the *Hamilton County Thoroughfare Plan* will be approved by the Hamilton County Regional Planning Commission. The Regional Planning Commission must then file the official Thoroughfare Plan with the Board of County Commissioners. At this time the Regional Planning Commission will also notify the County Engineer. The Board then publishes a notice in a countywide newspaper announcing an official plan for improvement of the county thoroughfare system, which will be on file in the County Planning + Development office for public review. The notice shall also give the time and place for a public hearing to consider amending the plan. At the hearing, the Board may order the plan changed or modified as deemed fit. A majority vote by the Board may then approve the plan or deny it.

Consideration (and subsequent adoption) of the official Thoroughfare Plan by the Board of County Commissioners occurs independently of any consideration of access management regulations and capital appropriations for any recommended highway improvement. Both the regulations and budgetary considerations require separate legislative action.

The Thoroughfare Plan is a statement of public policy toward future growth, development, and redevelopment. It is recommended that the plan be reviewed every five years to ensure that it comports with such policy goals. Failure to review or update the plan every five years, however, does not invalidate the existing plan. Additionally, major unanticipated changes in the local or regional economy might necessitate some updating of the plan in the intervening years, in which case certain amendments may be appropriate. All amendments must be approved according to the formal procedure articulated herein.