

National Functional Classification:

How it's Used in Michigan

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Introduction & Definitions

National Functional Classification (**NFC**) is a planning tool which federal, state and local transportation agencies have used since the late 1960's. The Federal Highway Administration (**FHWA**) developed this system of classifying all streets, roads and highways according to their function. The FHWA publication, **Highway Functional Classification: Concepts, Criteria and Procedures**, provides the basis for much of the following information.

Principal arterials are at the top of the NFC hierarchial system. Principal arterials generally carry long distance, through-travel movements. They also provide access to important traffic generators, such as major airports or regional shopping centers.

EXAMPLES: Interstate and other freeways; other state routes between large cities; important surface streets in large cities.

Minor arterials are similar in function to principal arterials, except they carry trips of shorter distance and to lesser traffic generators.

EXAMPLES: State routes between smaller cities; surface streets of medium importance in large cities; important surface streets in smaller cities.

Collectors tend to provide more access to property than do arterials. Collectors also funnel traffic from residential or rural areas to arterials.

EXAMPLES: County, farm-to-market roads; various connecting streets in large and small cities.

Local roads primarily provide access to property.

EXAMPLES: Residential streets; lightly-traveled county roads.

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Percentage Guidelines

FHWA research led to guidelines regarding the percentage of streets and roads that should be in each of the functional classification categories. Different guidelines exist for urban and rural areas, because travel characteristics and density of development differs between the two land uses.

Percentage Guidelines Table

-----Percentage of Miles (range)

CATEGORY-----	URBAN-----	RURAL
Principal Arterials-----	5 - 10 %	2 - 4 %
Principal Arterials plus Minor Arterials -----	15 - 25 %	6 - 12 %
Collectors-----	5 - 10 %	20 - 25 %
Local Roads-----	65 - 80 %	65 - 75 %

Michigan's Use of NFC

All public streets, roads and highways in Michigan have an NFC designation. The Michigan Department of Transportation (**MDOT**) and the appropriate local officials (see **Changing NFC** below) work cooperatively to functionally classify roads. The results of this joint process are submitted to FHWA for final approval. FHWA uses various criteria in granting approval to the NFC in a given area. One element of the FHWA's approval process is the **statewide** application of the percentage guidelines (above). Michigan is currently within the guidelines for all NFC categories except that of rural collectors. The FHWA has approved Michigan's NFC with comments regarding future adjustment among the NFC categories.

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Changing NFC

Periodically, MDOT engages in a statewide functional reclassification. At such times, MDOT asks the appropriate local officials to review the classifications of all streets and roads under their jurisdiction. After their review, the local officials identify changes in classification to match changes in road function.

Local officials may also initiate individual changes to the NFC in their area anytime. The type of area determines which local official makes the request. Below is a table which tells which local officials request changes by area type:

TYPE OF AREA -----	APPROPRIATE LOCAL OFFICIALS
Rural: Outside a MAB -----	County Road Commission
Rural: Inside a MAB -----	MPO
Urban: Outside a MAB -----	Central City/County Road

Commission

Urban: Inside a MAB ----- MPO

EXPLANATION OF TERMS IN TABLE: Federal-aid urban boundaries

enclose areas with a population of 5,000 or more. The federal-aid urban boundary is the line which divides **rural** from **urban** land area. Rural land area lies outside a federal-aid urban boundary while urban land area lies inside. [Additional information about federal-aid urban boundaries is available.](#) **MPO** stands for Metropolitan Planning Organization and **MAB** stands for Metropolitan Area Boundary. MPOs and MABs are established for places having a population of 50,000 or more.

To change a functional classification, the appropriate local official makes a written request to MDOT. This request must describe the road in question, and give justification for the change based on how the road functions. MDOT's response to the request may include a field review. MDOT will also verify compatibility of the requested NFC change with other road classification systems, such as Michigan's Act 51 "legal systems" (e.g., county primary, city major). Once MDOT concurs with the request, it will be submitted to the FHWA for final approval.

Proposed or unbuilt roads may be added to the NFC system in a similar manner. The *proposed* function for the new road should be described in the written request, as well as the planned timetable for constructing the road. Proposed roads with an expected function of collector or higher, and a construction timetable of six to eight years, are typically included in the NFC system.

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NFC & Federal-aid

The NFC designation of a given road determines whether it is a **federal-aid** road. Federal-aid roads are **eligible** for federal funds, either as part of the [National Highway System \(NHS\)](#) -- usually limited to principal arterials) or through the Surface Transportation Program (**STP**). Federal-aid roads are, collectively: all principal arterials, all minor arterials, all urban collectors and all rural major collectors. If a road has an NFC designation of rural minor collector, it is not included in the definition of federal-aid road, but it does have some limited eligibility for federal funds. Roads classified as urban or rural local, are not eligible for federal-aid.

The Transportation Equity Act for the 21st Century -- TEA21 or TEA-21, for short -- is the name of the current federal legislation which governs the eligibility of roads for federal-aid, and related matters. President Clinton signed this bill into law on June 9, 1998.

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Additional Information

More information about NFC and related topics may be obtained from:

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