

Functional Classification – Routine Changes

Transportation Planning Branch		Approved: January 8, 2009 Version 2
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Purpose

This procedure outlines the steps necessary to revise the functional classification (FC) of a road.

Background

Functional classification is a federally defined process by which streets and highways are grouped into classes, according to the character of service they are intended to provide. The classes are as follows:

- **Principal Arterial** – The principal arterial system should serve the major centers of activity of a metropolitan area, the highest traffic volume corridors, and the longest trip desires; and should carry a high proportion of the total urban area travel on a minimum of mileage. Principal Arterials should be further divided into three subcategories: Interstates; Other Freeways and Expressways; and Other Principal Arterials. In rural areas, only Interstate and Other Principal Arterial classifications are used.
- **Minor Arterial** – The minor arterial street system should interconnect with and augment the urban principal arterial system and provide service to trips of moderate length at a somewhat lower level of travel mobility than principal arterials.
- **Collector** – The collector street system provides land access service and traffic circulation within residential neighborhoods, commercial and industrial areas. It differs from the arterial system in that facilities on the collector system may penetrate residential neighborhoods, distributing trips from the arterials through the area to the ultimate destination. In rural areas, the collectors are further divided into major and minor collectors.
- **Local** – The local street system consists of all roads not defined as arterials or collectors and primarily provides access to land with little or no through movement.

There are three primary reasons for making functional classification changes:

1. Funding (e.g., change in location of Urban Area Boundaries (UAB))
2. Construction completion of roads previously listed as “projected”

3. Completion of local Comprehensive Transportation Plans (CTPs)

Note: The Functional Classification Overhaul process is different from the Routine Change process in that the overhaul results from changes in the urban area boundaries from the Decennial Census. These boundary changes initiate the Boundary Revision procedure, which results in changes in Functional Classification. (See [“Administration of the Boundary Revision Program”](#) procedure for additional information.)

Responsibility

The Technical Services Unit of the Transportation Planning Branch (TPB) is responsible for managing this process. A Project Manager is selected at the beginning of the process. MPO and RPO Coordinators within the Planning Groups will be responsible for coordination steps within the process as outlined below.

Policy, Regulatory, and Legal Requirements

[Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users](#) (SAFETEA-LU)

[FHWA Functional Classification Guidelines: Highway Functional Classification – Concepts, Criteria and Procedures](#)

[USC Title 23, Section 134](#)

[23 CFR 470.105](#)

Scheduling and Time Constraints

Begin documentation as soon as [request for change](#) is received from the Requestor (the Requestor may be the Program Development Branch, the CTP Project Engineer, an MPO or an RPO).

Procedures

The designated Project Manager will follow the steps below to revise the functional classification information.

Step	Action
1	The designated Project Manager (currently Rockne Bryant) will begin the process as soon as the request for a change is received. Once the request is received, the details are logged in a spreadsheet. Tracking the change is important.
2	The Project Manager will review and evaluate the request for change . <ul style="list-style-type: none">- Items which should be considered include reasons for the proposed change, FHWA guidelines for inclusion in a particular category, connectivity of the system, and consistency with surrounding counties, urban clusters (previously referred to as urban areas), or urbanized areas (MPO) which will be affected by this proposal. The Project Manager will be responsible for coordination of all additional jurisdictional changes necessitated by the changes for the county, urban cluster, or urbanized area.- Decide if the proposed change falls within a Rural Area, Urban Cluster, or Urbanized Area and then proceed to the steps corresponding to that area.
3	The Project Manager will be responsible for making changes within the Rural Areas.

	<p>Proceed with the following steps for RURAL AREAS:</p> <ol style="list-style-type: none"> 1. Before beginning coordination with the RPO, and after analyzing the desired changes, the Project Manager should send a copy of the request to GIS (currently Mark Mintz) for them to prepare two Microstation maps showing the current FC system, and two Microstation maps showing the proposed FC system. When the maps are returned from GIS, a transmittal form will accompany the maps that both the Project Manager and the GIS contact must sign. 2. Once the maps are received from GIS, the Project Manager should mark each proposed facility on the maps as to whether it is included in the Transportation Improvement Program (TIP) or not. The Functional Classification (FC) “existing plus TIP committed” system shall provide for proper connectivity. The long-range proposals from the CTP (not in the TIP) should be shown, and supplement the system. 3. The Project Manager will calculate mileage changes proposed in each category, both rural and urban. 4. The Project Manager, the Project Manager’s Group Supervisor, the TPB Staff Engineer, and the TPB Staff RPO coordinator should meet to discuss the proposal to ensure it is in compliance with FHWA regulations. All must initial the map showing the proposed system. <ul style="list-style-type: none"> - <i>The maps received from GIS, mileage calculations, and the FC map books should be a part of the coordination review.</i> - <i>If the changes will affect an MPO, then the TPB MPO Coordinator should also be present at this meeting.</i> <ol style="list-style-type: none"> (a) For functional classification system changes in counties that do not have Thoroughfare Plans or CTPs, send letter to the RPO to advise of proposed changes (see Sample Coordination Letter, as well as a Sample Response Letter). The RPO is responsible for providing the local coordination through the RPO committees. (Proceed to “Submittals” process). (b) For functional classification changes due to development of a County CTP, or in counties that have Thoroughfare Plans or CTPs, further coordination is required. <ul style="list-style-type: none"> - <i>For changes initiated by CTP adoptions or revisions, changes to the functional classification system will be incorporated as part of the CTP adoption or revision itself. This MUST be coordinated through the Project Manager prior to final approval. (After adoption, proceed to “Submittals” process.)</i>
4	<p>Proceed with the following steps for URBAN CLUSTERS (previously referred to as URBAN AREAS):</p> <p>Note: <i>For purposes of functional classification (FC), urban areas under 5,000 in population are <u>handled in the same manner as rural areas</u>. Changes to the FC system do not necessarily have any impact on the Thoroughfare Plan or CTP.</i></p> <ol style="list-style-type: none"> 1. Before beginning coordination with the RPO and after analyzing the desired changes, the Project Manager should send a copy of the request to GIS (currently Mark Mintz) for them to prepare two Microstation maps showing the current FC system, and two Microstation maps showing the proposed FC system. When the maps are returned from GIS, a transmittal form will

	<p>accompany the maps that both the Project Manager and the GIS contact must sign.</p> <ol style="list-style-type: none"> 2. Once the maps are received from GIS, the Project Manager should mark each proposed facility on the received maps as to whether it is included in the Transportation Improvement Program (TIP) or not. The Functional Classification (FC) “existing plus TIP committed” system shall provide for proper connectivity. The long-range proposals (not in the TIP) should be shown, and supplement the system. 3. The Project Manager will calculate mileage changes proposed in each category, both rural and urban. 4. The Project Manager, Project Manager’s Group Supervisor, and Planning Engineer who is geographically assigned to the area in question must meet to discuss the proposal and to ensure it is in compliance with FHWA regulations. All must initial the map showing the proposed system. <ul style="list-style-type: none"> - <i>The maps received from GIS, mileage calculations, and the FC map books should be examined for coordination review.</i> - <i>If the changes will affect an MPO, then the TPB MPO Coordinator should also be present at this meeting.</i> 5. Two sets of maps must be prepared: two copies that show the current FC designations and two copies that show the proposed FC designations. If there have been no changes to the maps after the meeting in the previous step, those maps can be considered as one of the two sets. 6. After the initial in-house review, the designated Project Manager keeps and maintains the initialed map. The other map is sent to the RPO for consultation accompanied by a letter of transmittal from the Project Manager to the RPO (see Sample Coordination Letter), as well as a Sample Response Letter (See Step 8). <ul style="list-style-type: none"> - <i>Before sending the updated maps to the RPO, the Project Manager should coordinate with the RPO or MPO representative and the local contact person to explain the proposed changes.</i> 7. If applicable, address any necessary county revisions in accordance with the Rural Procedures. 8. A letter of coordination from the RPO must be provided. The RPO should send two signed copies of the response letter to the Project Manager. 9. Upon receipt of the letter of coordination, the Project Manager shall proceed to “Submittals” process.
<p>5</p>	<p>Proceed with the following steps for URBANIZED AREAS (MPOs):</p> <p>Note: <i>These procedure steps apply to revisions in the FC system in urbanized areas, otherwise known as Metropolitan Planning Organizations (MPOs), with populations greater than 50,000. The MPOs must be fully involved in the FC effort. NCDOT initiates coordination and must continue to work closely with the MPOs. The MPO must provide a letter indicating that they approve of the change or that NCDOT coordinated with them. MPO approval is not required, but is desired.</i></p> <ol style="list-style-type: none"> 1. Before showing the system to the MPO, and after analyzing the desired changes, the Project Manager should send a copy of the request to GIS (currently Mark Mintz) for them to prepare two Microstation maps showing the current FC system, and two Microstation maps showing the proposed FC

	<p>system. When the maps are returned from GIS, a transmittal form will accompany the maps that both the Project Manager and the GIS contact must sign</p> <ol style="list-style-type: none"> 2. Once the maps are received from GIS, the Project Manager should mark each proposed facility on the received maps as to whether it is included in the Transportation Improvement Program (TIP) or not. The Functional Classification (FC) “existing plus TIP committed” system shall provide for proper connectivity. Recommendations from the LRTP (not in the TIP) should be shown, and supplement the system. 3. The Project Manager will calculate mileage changes proposed in each category, both rural and urban. 4. The Project Manager, Project Manager’s Group Supervisor, and TPB’s MPO Coordinator must meet to discuss the proposal to ensure it is in compliance with FHWA regulations. All must initial the map showing the proposed system. <ul style="list-style-type: none"> - <i>The maps received from GIS, mileage calculations, and the FC map books should be examined for coordination review.</i> 5. Two sets of maps must be prepared: two maps that show the current FC designations and two maps that show the proposed FC designations. If there have been no changes to the maps after the meeting in the previous step, those maps can be considered as one of the two sets. 6. After the initial in-house review, the designated Project Manager keeps and maintains the initialed map. The other map is sent to the MPO accompanied by a letter of transmittal from the Project Manager to the MPO (see Sample Coordination Letter), as well as a Sample Response Letter. (See Step 8). <ul style="list-style-type: none"> - <i>Before sending the updated maps to the MPO, the Project Engineer should coordinate with the MPO representative and the local contact person to explain the proposed changes.</i> 7. If applicable, address any necessary county revisions in accordance with the Rural Procedures. 8. The MPOs must be fully involved in the Functional Classification effort. The State initiates coordination, and then works closely with the MPOs. At a minimum, the proposal should be presented to both the TAC and TCC. 9. A letter of coordination (or resolution) from either the TAC Chair or TAC action must be provided. TCC action or a letter from the TCC Chair, or any other staff person is not acceptable. It is acceptable for the MPO to modify the response to meet their needs. The MPO should send two signed copies of the response letter to the Project Manager. 10. Upon coordination with the MPO and receipt of the response letter, the Project Manager should proceed to the “Submittals” process.
6	<p>When the revised Functional Classification documentation and maps are completed and approved, the Project Manager sends it to GIS (currently Mark Mintz) to print out for distribution. (Refer to “Submittals” process for the number of copies for FHWA and for distribution.)</p>
7	<p>SUBMITTALS Process:</p> <ol style="list-style-type: none"> 1. FHWA Submittal – The Project Manager will submit to FHWA the following items:

	<ul style="list-style-type: none"> • Cover letter (see Sample FHWA Transmittal Letter) – The cover letter should include a statement that the local areas have been involved in the functional reclassification (for rural areas or urban clusters) or that the MPO has been fully involved in the functional reclassification (for MPOs). A copy of the letter/resolution from the RPO/MPO should be attached. • Two (for urban clusters or rural areas) or three (for MPOs) copies of the revised map showing all functional classifications properly color-coded. (The third copy-MPO only – will be forwarded by FHWA for coordination with FTA). The map should include a north arrow, color legend, and a revision date (to be the same date as the date on the letter of transmittal to FHWA). For County Thoroughfare Plans or CTPs do NOT include long range proposals (those not in the TIP). • Two copies of the revised map showing the UAB and all rural arterial highways (for rural revisions) or urban principal highways (for urban and MPO revisions). The map should include a north arrow, color legend, and a revision date (to be the same date as the date on the letter of transmittal to proposals). • A table summarizing the changes to each FC category. <ol style="list-style-type: none"> 2. Upon approval, FHWA shall return one signed, approved copy to the Project Manager. The Project Manager will then organize and keep the signed copies. 3. Prepare for distribution with revised FC mapping. Additional copies of the revised map shall be prepared and distributed as follows with the distribution letter (see Sample Distribution Letter) <ul style="list-style-type: none"> • RPO and MPO – one copy each • GIS Director – one copy • Program Development Branch Manager – one copy
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Warnings and Precautions

For coordination with an RPO, a letter or resolution of coordination from the TAC Chair must be provided. For clarification, include an explanation of all changes that were made in each functional classification category.

It is important to maintain good records throughout the process.

Resources and Tools

[Sample Change Request Memo](#)

[Sample Coordination Letter](#)

[Sample Response Letter](#)

[Sample FHWA Transmittal Letter](#)

[Sample Distribution Letter](#)

[“Administration of the Boundary Revision Program” procedure](#)

[FHWA Functional Classification Guidelines: Highway Functional Classification – Concepts, Criteria and Procedures](#)

Contacts

- For suggestions to change this procedure contact: Earlene Thomas (919) 715-5737 ext. 70

- For questions about performing this procedure contact: Rockne Bryant (919) 715-5482 ext. 379

Glossary

Comprehensive Transportation Plans (CTPs)

Functional Classification (FC)

Metropolitan Planning Organizations (MPOs)

Safe, Accountable, Flexible, Efficient Transportation Equity Act (SAFETEA-LU)

Transportation Improvement Program (TIP)

Transportation Planning Branch (TPB)

Urban Area Boundaries (UAB)

User Access

Restricted NCDOT, FHWA, MPO, RPO, Consultants, etc.

Flowchart

None

Record of Revision

Version	Section Affected	Description	Effective Date
1.1	Step 1 of Procedures & Contacts	Contact changed from Elisabeth Reddic to Rockne Bryant	7/21/2008
2	Scheduling & Time Constraints Procedures Resources & Tools	Updated linked documents and added a new hyperlinked document	1/08/2009