

# Functional Classification

MAG – 9/13/2016

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ADOT Multimodal Planning Division – GIS Group

# Overview

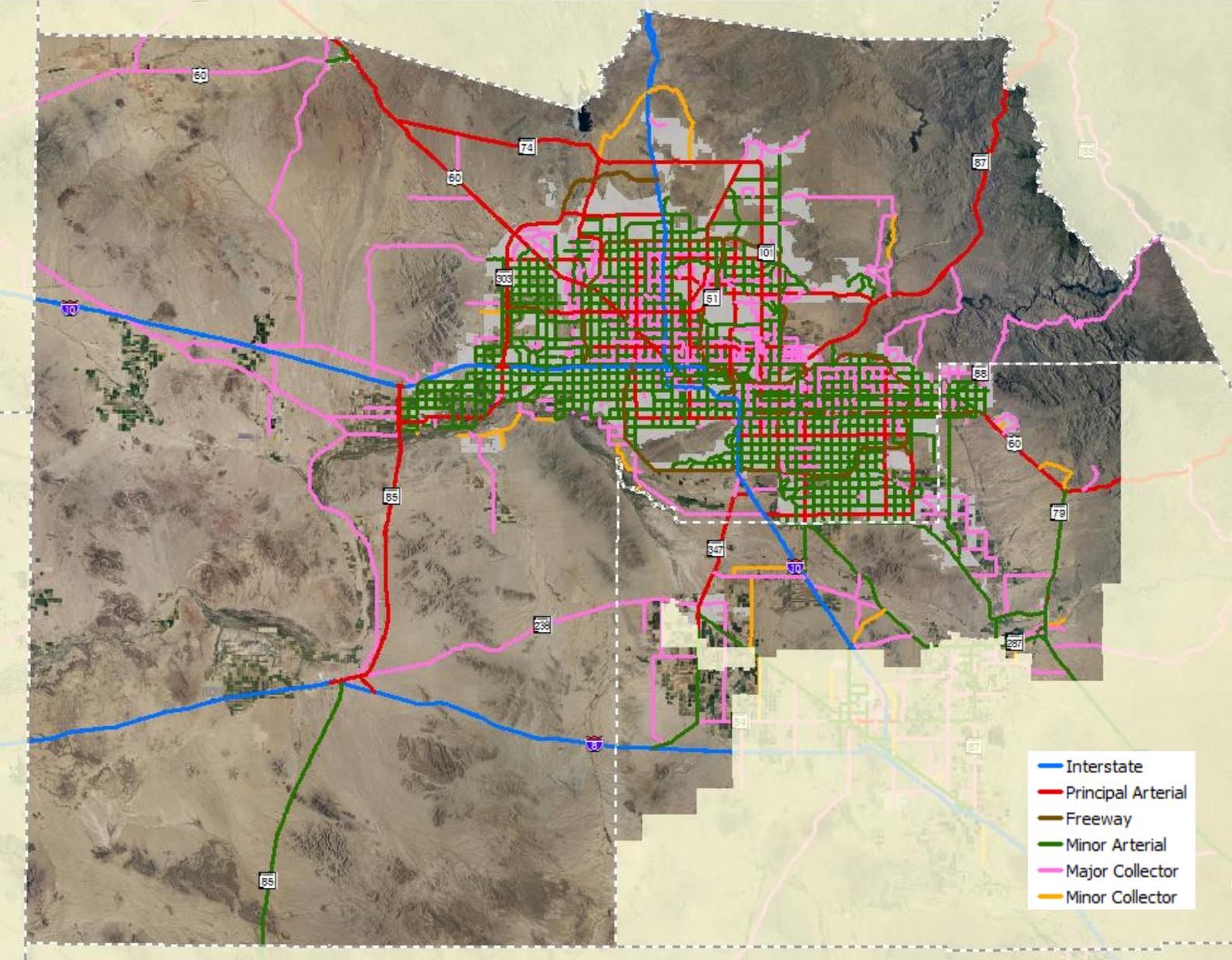
- ❑ What is Functional Classification?
- ❑ The Request Process
- ❑ Future Plans
- ❑ Questions?

# What is Functional Classification??

- ▶ The Federal-Aid Highway Act of 1973 required every state to Functionally classify their roadways.
- ▶ The Functional Classification of a road is based primarily on the characteristics of that road.

Code	Description
1	Interstate
2	Principal Arterial - Other Freeways or Expressways
3	Principal Arterial - Other
4	Minor Arterial
5	Major Collector
6	Minor Collector
7	Local

# MAG Regional Functional Classification



# Why is Functional Classification Important?

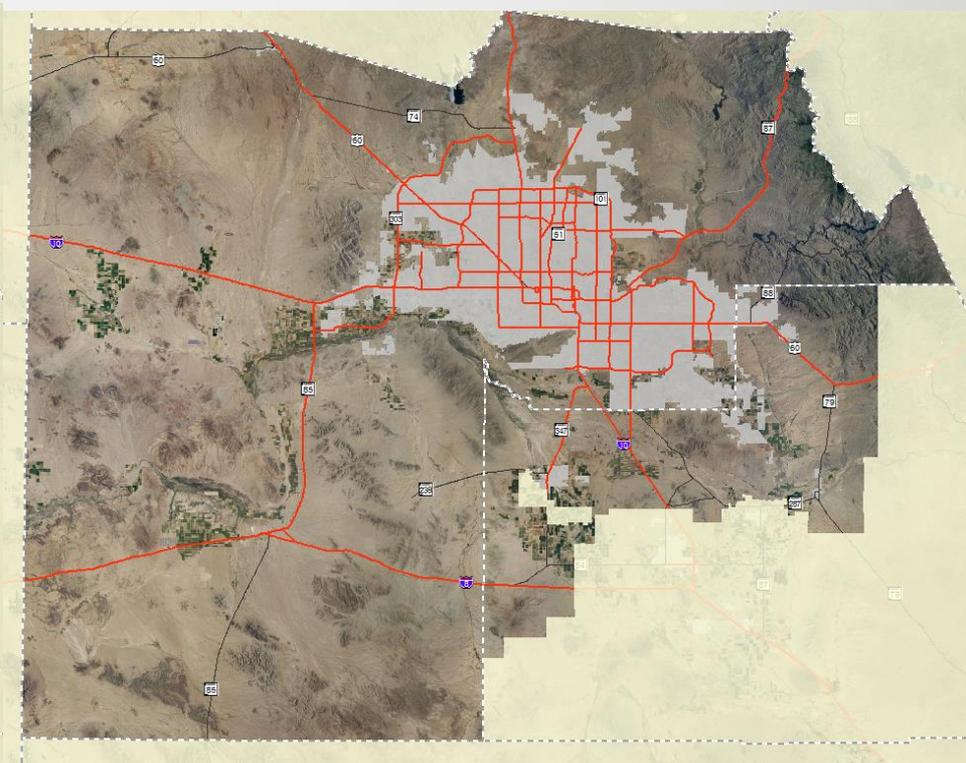
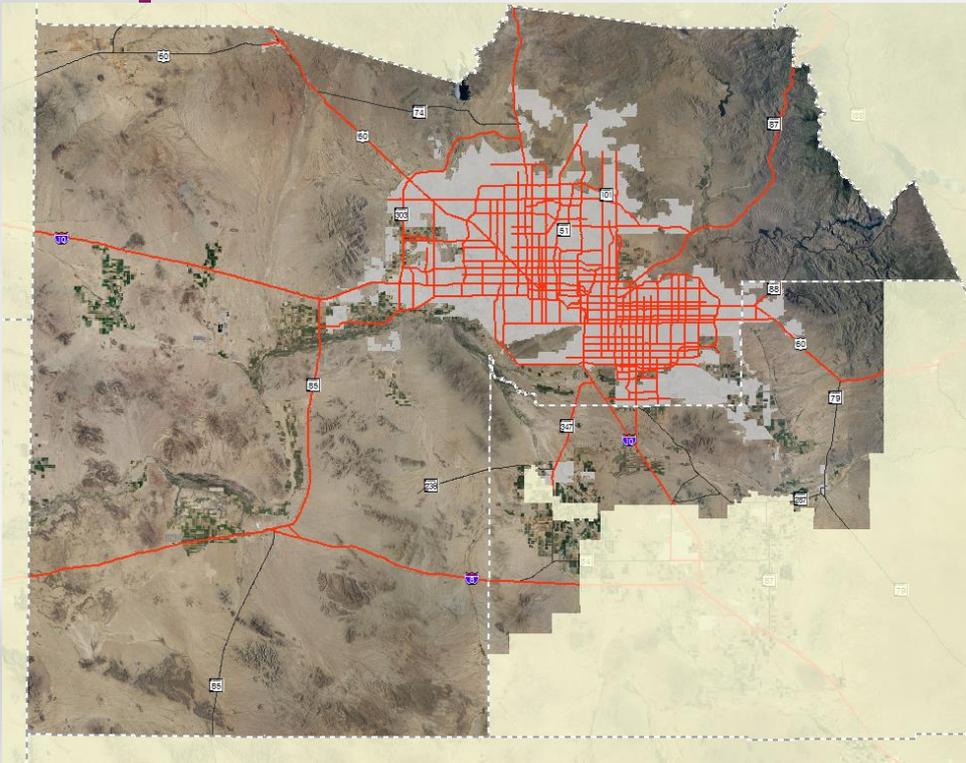
- ▶ Planning:
  - Used by all levels of government.
  - Helps to provide a picture of what our roadways are like.
- ▶ Funding:
  - Roadways classified as Urban Local, Rural Local, and Rural Minor Collectors are not eligible for federal funding.
- ▶ Reporting:
  - Data collected for HPMS is based on the roadway Functional Classification.

# How to Functional Classify your Roads

- ▶ Making changes to the functional classification system is a collaborative effort between local, county, COG/MPO, state, and FHWA officials.
- ▶ MAG's Principal Arterial network was reviewed and updated in 2014 due to MAP-21 requirements.
- ▶ Many of the Principal Arterials were downgraded.

# 2014 NHS

# 2015 NHS



# How to Functional Classify your Roads

- ▶ Traffic Counts: a useful tool in determining the functional classification of a roadway. But not always.

	Arterials				Collectors		Local
	Interstate	Other Freeway & Expressway	Other Principal Arterial	Minor Arterial	Major Collector	Minor Collector	
Typical Characteristics							
Lane Width	12 feet	11 - 12 feet	11 - 12 feet	10 feet - 12 feet	10 feet - 12 feet	10 feet - 11 feet	8 feet - 10 feet
Inside Shoulder Width	4 feet - 12 feet	0 feet - 6 feet	0 feet	0 feet	0 feet	0 feet	0 feet
Outside Shoulder Width	10 feet - 12 feet	8 feet - 12 feet	8 feet - 12 feet	4 feet - 8 feet	1 feet - 6 feet	1 feet - 4 feet	0 feet - 2 feet
AA DT (Rural)	12,000 - 34,000	4,000 - 18,500	2,000 - 8,500	1,500 - 6,000	300 - 2,600	150 - 1,110	15 - 400
AA DT (Urban)	35,000 - 129,000	13,000 - 55,000	7,000 - 27,000	3,000 - 14,000	1,100 - 6,300		80 - 700
Divided/Undivided	Divided	Undivided/Divided	Undivided/Divided	Undivided	Undivided	Undivided	Undivided
Access	Fully Controlled	Partially/Fully Controlled	Partially/Fully Controlled	Uncontrolled	Uncontrolled	Uncontrolled	Uncontrolled

# How to Functional Classify your Roads

- ▶ Major Activity Centers: schools, hospitals, sporting facilities, transportation depots, etc. can warrant a higher classification.

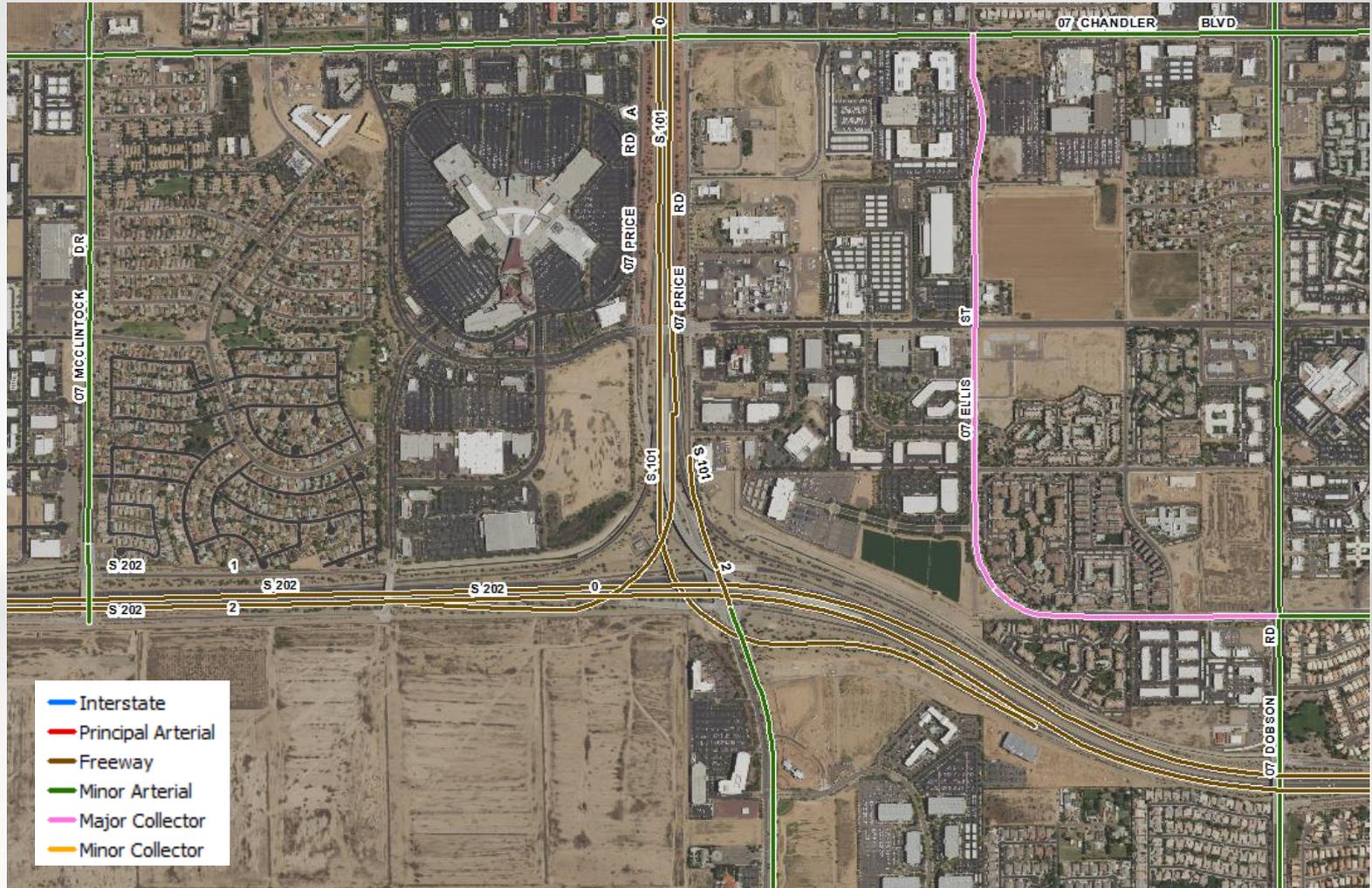


# How to Functional Classify your Roads

- ▶ Connectivity: the system should maintain connectivity and exist in a hierarchal order.
  - Principal Arterials should connect cities with cities. In most cases these are state highways.
  - Roads that are functionally classified above local should terminate at both ends with a road that is the same functional classification or higher.
    - For example, a Minor Arterial should only terminate at another Minor Arterial or a Principal Arterial. It shouldn't end at a Major Collector.

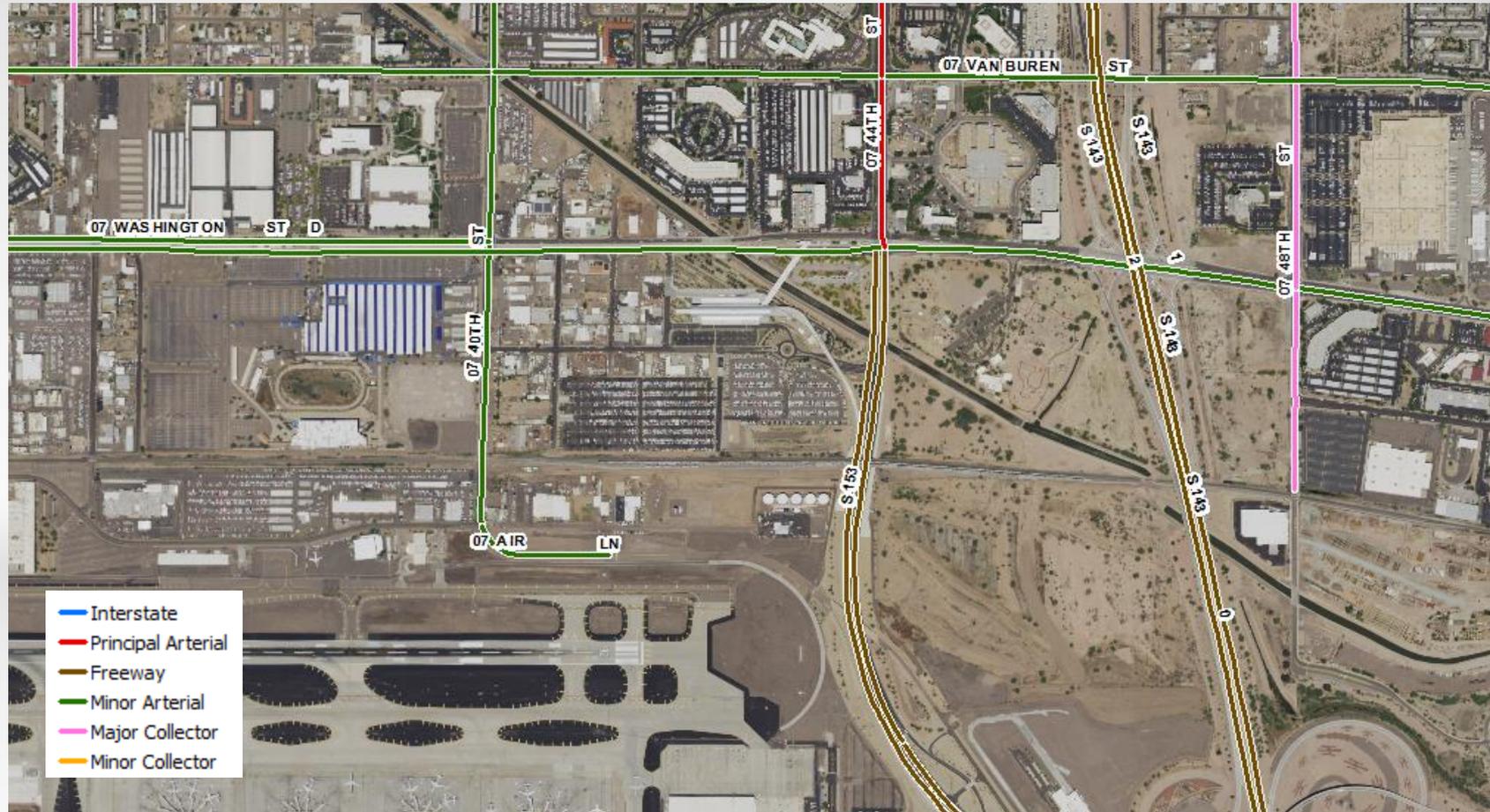
# Connectivity Example

## ▶ Good Connectivity



# Connectivity Example

## ► Poor Connectivity



# How to Functional Classify your Roads

- ▶ Urban boundaries are no longer a factor in determining the functional classification of your roadways. Although you can use them as a guide.
- ▶ Local roads should account for no less than 65% of all your roadway mileage
- ▶ Collectors and Arterials combined should account for no more than 35% of all your roadway mileage.

	Arterials				Collectors		Local
	Interstate	Other Freeway & Expressway	Other Principal Arterial	Minor Arterial	Major Collector	Minor Collector	
<b>Rural System</b>							
Mileage Extent for Urban States	1% - 2%	0% - 2%	2% - 5%	3% - 7%	10% - 17%	5% - 13%	66% - 74%
<b>Urban System</b>							
Mileage Extent for Urban States	1% - 2%	0% - 2%	4% - 5%	7% - 12%	7% - 13%	7% - 13%	67% - 76%

# Preparing Your Reclassification Request

1. Go to the ADOT homepage and click on “Maps” in the left menu. [www.azdot.gov](http://www.azdot.gov)



The screenshot shows the ADOT homepage with the following elements:

- Header:** ADOT logo, social media icons (Facebook, Twitter, YouTube, LinkedIn), and a Google Custom Search box.
- Navigation Menu:** About, Motor Vehicles, Projects, Business, Planning, News, Traffic, **Maps** (highlighted with a red box), and Contact.
- Main Content Area:** A large banner for "BUSINESS COACH ON DEMAND" featuring a play button icon and a background image of construction workers. Below the banner is the text "ADOT Business Coach" and a link to "Read more...".
- Left Sidebar:** A vertical stack of promotional tiles for "Subscribe for updates", "SERVICEARIZONA.com", "I-11", "ARIZONA HIGHWAYS", "GRAND CANYON STATE LOGO SIGNS", "FUEL TAX LICENSING SETUP Arizona", "Report FRAUD", and "CIVIL RIGHTS".
- ADOT News:** A section with a blue header and a list of 15 news items, including "U.S. 93 closed for crash in Wickenburg" and "ADOT completes replanting of saguaros on Loop 101 project".
- Vehicle Services:** A section with a blue header and links for "Office Hours and Locations", "Online Services", "Driver License, ID Application", and "Practice Driver Tests".
- Registration Renewal:** A form with fields for "Record Number" and "Vehicle ID Number (VIN) (last 2 digits)", and a "Continue" button.
- Footer:** The AZ.GOV logo and the text "Arizona's Official Web Site".

# Preparing Your Reclassification Request

2. In the Map section click on “Functional Classification Maps” in the left menu.

## Maps

The following maps are interactive. Roll over the map set you wish to view, and click View App to open the map portal.

**Note:** The state of Arizona makes no claims concerning the accuracy of these maps and assumes no liability resulting from the use of the information found herein.

The maps on this page are large, and details may take a few moments to load.

### More Maps

- 2016 Map Book
- County Maps (downloadable .CIT format)
- Existing Right of Way Plans
- Functional Classification Maps**
- Hazardous Materials Restricted Routes (Phoenix Area)
- Indian Reservation ITU Health Facilities
- Regional Transportation Plan Freeway Program 2006-2025
- Stormwater Program



Third Party MVD Locations Pr...



National Highway System in...



Airports of Arizona



Tribal Areas in Arizona



Rest Areas



ITS\_Infrastructure



State Highway System (SHS)



Railroads of Arizona



Arizona Mileposts

# Preparing Your Reclassification Request

## 3. Review maps and updated request form.

Geographic and Functional Maps

Functional Classification Maps

Stormwater Program Maps

Existing Right of Way Plans Maps

### Maps

#### Functional Classification Maps

The Functional Classification (FC) maps here are **the official FHWA-approved maps**. For information about changing the functional classification of a roadway please see the [Functional Classification Change Process](#) or the [Functional Classification Change Request Form](#).

- [Functional Classification Change Process](#)
- [Functional Classification Change Request Form](#)

Note: All maps are provided in PDF format and are designed to fit 11x17 paper. If you have any questions or requests regarding Functional Classification, please send an email to [PWhiteford@azdot.gov](mailto:PWhiteford@azdot.gov).

#### Counties

- [Apache](#)
- [Cochise](#)
- [Coconino](#)
- [Gila](#)
- [Graham](#)
- [Greenlee](#)
- [La Paz](#)
- [Maricopa](#)
- [Mohave](#)
- [Navajo](#)
- [Pima](#)
- [Pinal](#)
- [Santa Cruz](#)
- [Yavapai](#)
- [Yuma](#)

#### Cities, Towns and Places

- [Benson](#)
- [Bisbee](#)
- [Bullhead City \(North\)](#)
- [Bullhead City \(South\)](#)
- [Camp Verde](#)
- [Casa Grande](#)
- [Catalina](#)
- [Chino Valley](#)
- [Picture Rocks](#)
- [Pine-Strawberry](#)
- [Pinetop-Lakeside](#)
- [Prescott \(North\)](#)
- [Prescott \(South\)](#)
- [Prescott Valley \(North\)](#)
- [Prescott Valley \(South\)](#)
- [Queen Creek](#)

# Preparing Your Reclassification Request

## 4. Use the maps to view your current func class schema.

The screenshot shows a web page with a sidebar on the left containing links to 'Geographic and Functional Maps', 'Functional Classification Maps', 'Stormwater Program Maps', and 'Existing Right of Way Plans Maps'. The main content area is titled 'Maps' and 'Functional Classification Maps'. It includes a paragraph explaining that these are official FHWA-approved maps and provides links to the 'Functional Classification Change Process' and 'Functional Classification Change Request Form'. A note states that all maps are in PDF format and designed for 11x17 paper, with contact information for PWhiteford@azdot.gov. Below this, there are two lists: 'Counties' and 'Cities, Towns and Places'. The 'Counties' list is enclosed in a red rectangular box and includes: Apache, Cochise, Coconino, Gila, Graham, Greenlee, La Paz, Maricopa, Mohave, Navajo, Pima, Pinal, Santa Cruz, Yavapai, and Yuma. The 'Cities, Towns and Places' list includes: Benson, Bisbee, Bullhead City (North), Bullhead City (South), Camp Verde, Casa Grande, Catalina, Chino Valley, Picture Rocks, Pine-Strawberry, Pinetop-Lakeside, Prescott (North), Prescott (South), Prescott Valley (North), Prescott Valley (South), and Queen Creek.

Geographic and Functional Maps

Functional Classification Maps

Stormwater Program Maps

Existing Right of Way Plans Maps

## Maps

### Functional Classification Maps

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- [Functional Classification Change Process](#)
- [Functional Classification Change Request Form](#)

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# Preparing Your Reclassification Request

- Fill out a request for **each** functional classification change.
  - Attach a map showing the proposed change.



## Functional Classification Change Request

Application must be filled out completely

### Request Information

Road Name: \_\_\_\_\_ Segment Length: \_\_\_\_\_

Limits (termini): \_\_\_\_\_

Current Functional Classification: \_\_\_\_\_

Proposed Functional Classification: \_\_\_\_\_

Most Recent ADT: \_\_\_\_\_ Count Date: \_\_\_\_\_

ADT Source: \_\_\_\_\_

Request Source: \_\_\_\_\_ Request Date: \_\_\_\_\_

Is this a future road?      YES      NO  
               *If yes, construction must begin within 4 years of the request.*

Has the local agency (road owner) committed to funding any construction projects on this route?      YES      NO  
               *This includes but is not limited to new construction and improvements, excluding any Federal Funding. If yes, please attach documentation.*

Has the Regional Planning body approved this request?      YES      NO  
               *If yes, please attach a copy of either a) an adopted resolution passed by the regional planning body; or b) an approved motion shown in the minutes from an official meeting of the regional planning body.*

### Request Criteria

Provide justifications for the functional classification change request. If applicable, provide information on any specific traffic generators, population/housing changes (official Census or DES estimates), private or public development in the area, commercial/industrial activity, and any other pertinent information that will help to justify the request. Please cite specific data and data sources for all figures used in the justification. Attach a map of the area with the route indicated on the map. Legible, handwritten notes on the map are acceptable.

### Additional Information and Contact Information

Approved functional classification maps are posted online at <http://www.azdot.gov/maps/functional-classification-maps>. Please email or mail the completed form to the contact below.

Patrick Whiteford <a href="mailto:PWhiteford@azdot.gov">PWhiteford@azdot.gov</a> Phone: 602.712.8591 Fax: 602.712.6412	Multimodal Planning Division GIS Section 206 S 17th Ave, MD 310B Phoenix, AZ 85007
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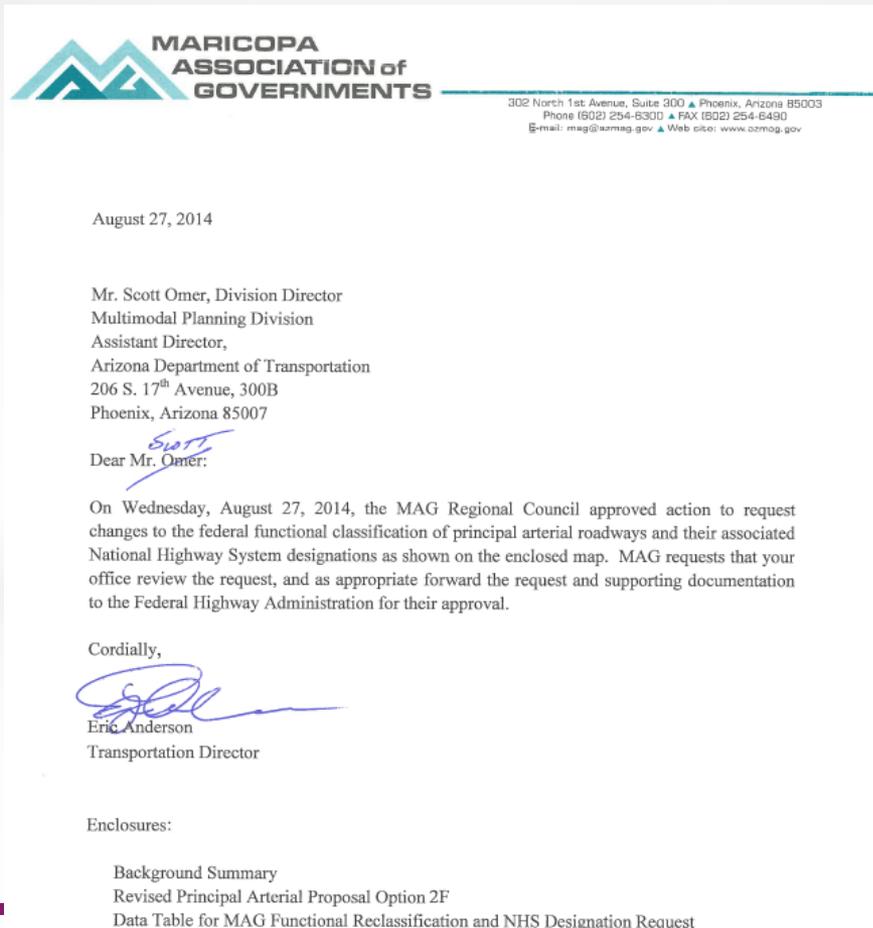
Form Created: 04/12/2015

# Preparing Your Reclassification Request

6. The COG or MPO should check the reclassifications and make sure that jurisdictional connectivity and hierarchy is maintained.

# Preparing Your Reclassification Request

7. The COG or MPO should create a memo for ADOT that approves or disapproves of the functional classification requests.



# Preparing Your Reclassification Request

8. All documents can be submitted via email or mailed.
  - However, I do need to see a signature on the memo.



# Functional Classification Request Form Example

## Functional Classification Worksheet

Road Name: North 9th Street Length: 0.27 Miles

Limits (termini): East Deuce of Clubs to East McNeil

Current Functional Classification: Local Road

Proposed Functional Classification: Major Collector

Most recent traffic count (ADT): 1967 mm/dd/yyyy 08/24/2015

If this is a future road, will construction begin within 4 years? (circle one)  Yes or  No

Has the local agency (owner) committed to funding any construction projects on this route (i.e. new construction, improvements, etc) , excluding or outside of any Federal funds? (circle one)  Yes or  No

*If yes, attach a copy of any documentation to this request*

Has the regional planning body approved this request? (circle one)  Yes or  No

*If yes, attach a copy of either a) an adopted resolution passed by the regional planning body; or (b) an approved motion shown in the minutes from an official meeting of the regional planning body.*

**Request Criteria:** Describe the reason for this request below (attach additional pages as necessary). If applicable, provide information on any specific traffic generators, population/housing changes (official Census or DES estimates), private or public development in the area, commercial/industrial activity and any other pertinent information that will help to justify this request. Please cite specific data and data sources for all figures used in the justification. Attach a map of the area with the route indicated on the map. Maps may be printed from the ADOT website at <http://tpd.az.gov>. Legible, handwritten notes on the map are acceptable.

North 9th Street is located within the City of Show Low's downtown core. Access to the City Library and City Hall are provided off of 9th Street. This street is included in the current and ongoing Downtown Improvement Project, which includes the addition of curb, gutter, sidewalk, lighting, and planters, throughout the core. This bus stop on 9th Street at City Hall and the Library has the third highest ridership counts in the City. This street serves as a critical North-South connector to the highway corridors for the Police and Fire Departments. North 9th Street should be reclassified as a Major Collector, similar to other streets serving the city's downtown core.

# Future Plans

- ▶ Involve ADOT before going to your Streets Committee for review
- ▶ Statewide Reevaluation of the Functional Classification System
- ▶ Online Request Process

# Questions?

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