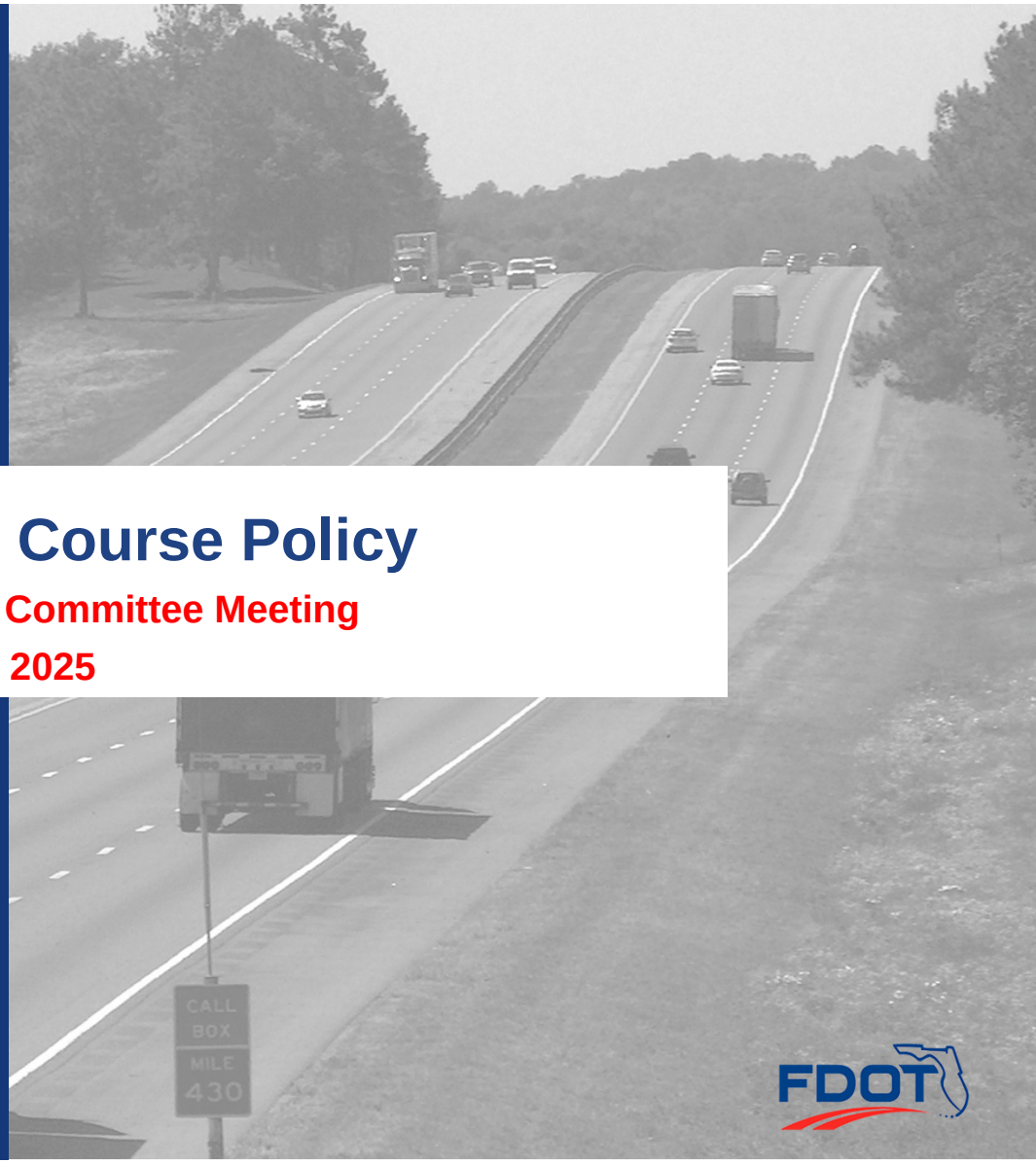
FDOT Friction Course Policy

Flexible Pavement Committee Meeting

July 2025



Policy History

Locations Requiring OGFC		
Year	**Facility Type**	**Design Speed**
Pre-1995 to 2002	Multi Lane Flush Shoulder (Arterials & Limited Access Facilities)	≥ 55
2002 to Aug 2024	Multi Lane Flush Shoulder (Arterials & Limited Access Facilities)	≥ 50
Aug 2024 to Dec 2024	Limited Access Facilities	All
Dec 2024 to Current	Multi Lane Flush Shoulder (Arterials & Limited Access Facilities)	≥ 55 & All LA Facilities, regardless of Design Speed

Current (2025) Policy

- **In the FDOT Flexible Pavement Design Manual (see Chapter 4)**
- **Place OGFC (FC-5) on the following:**
  - All LA Facilities
  - Multilane flush shoulder roads with design speed of 55 mph and greater
- **Place DGFC on all other facilities**

TABLE 4.1
FRICTION COURSE POLICY

Design Speed (mph)	Two Lane	Multilane
Limited Access Mainline Roadways		
All	FC-5	FC-5
Arterial and Collector Flush Shoulder Roadways		
≤ 50	FC-12.5 or FC-9.5	FC-12.5 or FC-9.5
≥ 55		FC-5
Arterial and Collector Curbed Roadways		
All	FC-12.5 or FC-9.5	FC-12.5 or FC-9.5

NOTES:

1. Include a friction course on all roads and ramps with a design speed ≥ 35 mph, except for two lane roads having a five-year projected AADT (from the opening year) of 3000 vehicles per day or less.
2. FC-5 should be considered for multilane curbed roadways with design speeds ≥ 55 mph when there is a history of wet weather crashes.
3. Coordinate with the District Pavement Design Engineer to determine the appropriate friction course to use on limited access ramps. See Section 4.2 for additional information.

Upcoming (2026) Policy

- **Introducing FC-7 as another OGFC option for qualifying arterials**
- **Place OGFC (FC-5) on the following:**
  - All LA Facilities
- **Place OGFC (FC-5 or FC-7) on the following:**
  - Multilane flush shoulder roads with design speed of 55 mph and greater
- **Place DGFC on all other facilities**

TABLE 4.1
FRICTION COURSE POLICY

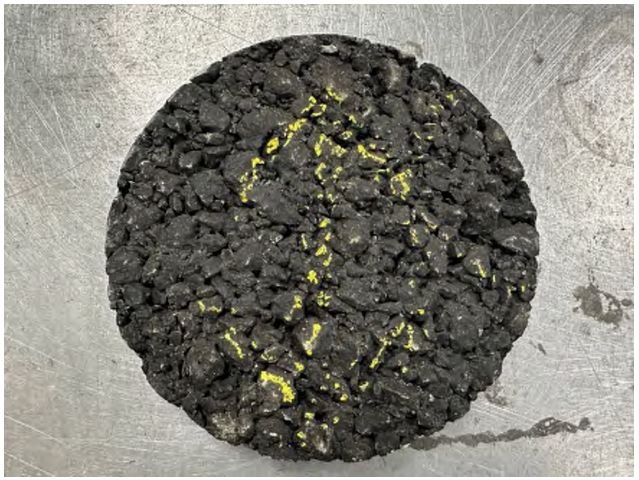
Design Speed (mph)	Two Lane	Multilane
Limited Access Mainline Roadways		
All	FC-5	FC-5
Arterial and Collector Flush Shoulder Roadways		
≤ 50	FC-12.5 or FC-9.5	FC-12.5 or FC-9.5
≥ 55		FC-5 or FC-7
Arterial and Collector Curbed Roadways		
All	FC-12.5 or FC-9.5	FC-12.5 or FC-9.5

NOTES:

1. Include a friction course on all roads and ramps with a design speed ≥ 35 mph, except for two lane roads having a five-year projected AADT (from the opening year) of 3,000 vehicles per day or less.
2. An OGFC should be considered for multilane curbed roadways with design speeds ≥ 55 mph when there is a history of wet weather crashes.
3. Coordinate with the District Pavement Design Engineer to determine the appropriate friction course to use on limited access ramps. See Section 4.3 for additional information.

Adding Guidance for Decision-Making

- Describes material differences between FC-5 and FC-7
- FC-5 remains ideal for higher speed roads with limited stopping or turning movements
- FC-7 is an ideal friction course for arterials with multiple and/or closely spaced intersections
- Which OGFC on qualifying arterials will be District-level decision



FC-5 (Section 11)

FC-7 (Section 12)

Cores shown were taken from US 301 Asphalt Test Road

Questions

- **What if I have an FC-5 that recently let and I want to use FC-7 instead?**
  - It depends - this can probably be accommodated. Contact your District Construction Office, State Materials Office, and CO Pavement Design Section.

- **What if I am unsure of whether to use FC-5 or FC-7 for my design project?**
  - Contact the State Materials Office and CO Pavement Design Section.

- **Where can I learn more details about the material differences between FC-5 and FC-7?**
  - Contact the State Materials Office (specifically, Jim Musselman and Greg Sholar)

Questions?

Derwood C. Sheppard, P.E.
State Roadway Design Engineer
Derwood.Sheppard@dot.state.fl.us
850-414-4334

Mary Jane Hayden, P.E.
State Pavement Design Engineer
MaryJane.Hayden@dot.state.fl.us
850-414-4783