ITSIQA Intersection Movement Count
Naming Convention

Intersection Configuration Description

ITSIQA reports Intersection Movement Count information based on structures defined in the ITSIQA Detailed Design Document. These structures describe a three-level approach to defining an intersection. These three levels include:

1. Intersection Level
2. Approach Level
3. Lane Level

Parent-child relationships link each of these three levels. An intersection contains two or more approaches. Each approach contains one or more lanes. The following figure depicts a typical intersection. In this example, the intersection has four approaches. The northbound and southbound approaches have three lanes each while the eastbound and westbound approaches have two lanes each.
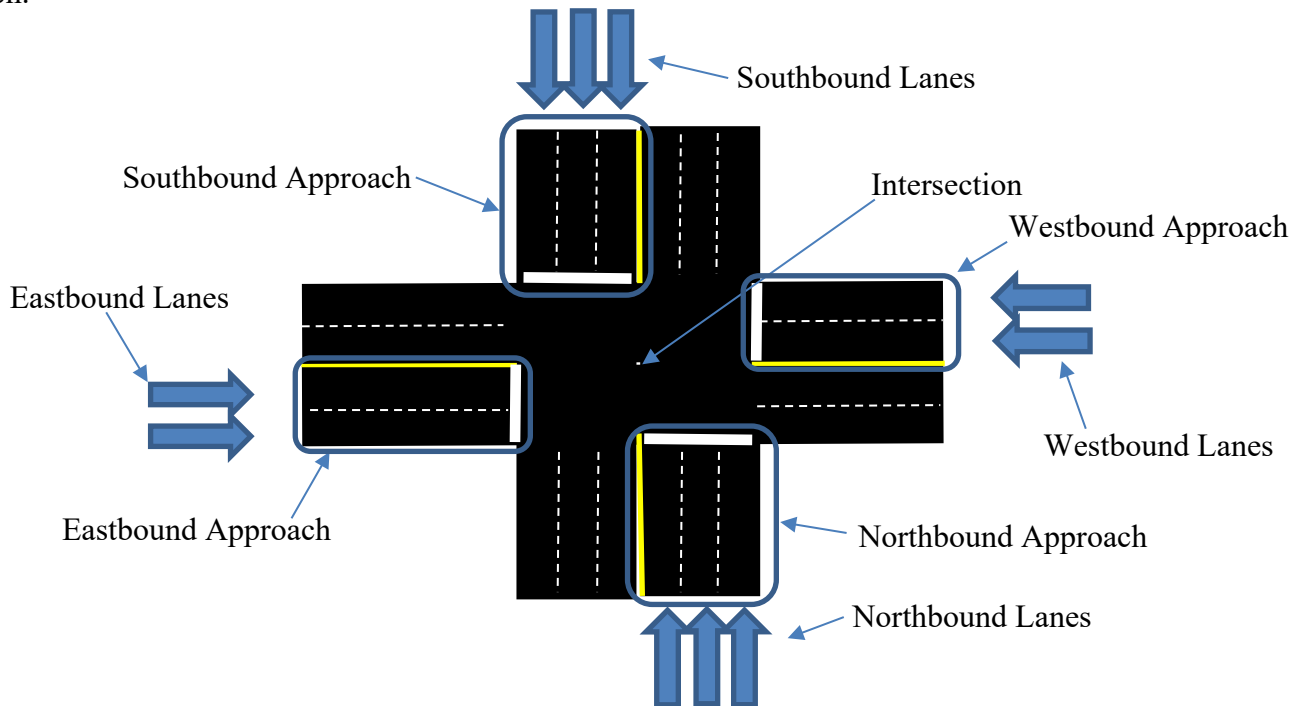

Figure 1: Example of Typical Intersection

Each approach, as depicted above, has a specific direction of travel, which must be one of the following: Northbound, Southbound, Eastbound, or Westbound. Note that because an intersection can have more than four approaches, there may be more than one Northbound, Southbound, Eastbound, or Westbound approach. Also note that the direction of travel references the nearest compass direction at the intersection, independent of the designated roadway direction.

Intersection Level Identifiers

ITSIQA uses a unique identifier for each intersection, called Intersection IDs. All intersections, except for those owned by Seminole County, use the following naming convention for its Intersection IDs.

{Three-Letter Agency Identifier}-{Four-Digit Controller ID}

The Four-Digit Controller ID is unique for each operating agency and should match the identifier associated with the intersection's signal controller. ITSIQA originally acquired these numbers from the ATSPM database. These numbers are zero-leading and are always four digits. For example, controller 123 would have a Controller ID of 0123. Seminole County intersections only consist of a Four-Digit Controller ID.

The Three-Letter Agency Identifier uses one of the following Identifiers noted in the table below. These Agency Identifiers are based on the agency that owns and operates the Advanced Traffic Management System (ATMS) signal control system the intersection communicates to.

Table 1: Agency Identifiers

Agency	Three-Letter Agency Identifier
BREVARD COUNTY	BRE
CITY OF DAYTONA BEACH	DBC
LAKE COUNTY	LKC
MARION COUNTY	MRN
CITY OF MELBOURNE	MEL
CITY OF OCALA	OCA
ORANGE COUNTY	ORC
CITY OF ORLANDO	ORL
OSCEOLA COUNTY	OSC
CITY OF PALM COAST	PCT
REEDY CREEK IMPROVEMENT DISTRICT	RCD
SEMINOLE COUNTY*	<none>
VOLUSIA COUNTY	VOL
FDOT DISTRICT 5	D5I

* = Seminole County's three-digit identifier is not used for Intersection IDs.

An example of an Intersection ID includes: ORC-1003. For this Intersection ID, the leading "ORC" denotes that this intersection operated by Orange County. The proceeding "1003" denotes Controller 1003 is used to control the signal at this intersection.

Revision Date: 10/14/2020

Approach Level Identifiers

ITSIQA uses a unique identifier for each approach within an intersection, called Approach IDs. Approach IDs are based off the approach's intersection's Intersection ID, the approach's direction of travel, and an index. The following is the format used for Approach IDs.

{Intersection ID}-{One-Letter Direction of Travel}{Approach Index}

The One-Letter Direction of Travel indicates the direction of travel of the approach. The following table indicates all possible values for the One-Letter Direction of Travel.

Table 2: One-Letter Identifier for the Direction of Travel

Direction of Travel	One-Letter Identifier
Northbound	N
Southbound	S
Eastbound	E
Westbound	W

Note that the value of this One-Letter Identifier always matches the reported direction of travel for the approach. Also note that the direction of travel for an approach references the nearest compass direction at the intersection, independent of the designated roadway direction. For example, let Road A and Road B be East-West corridors that intersect. At the intersection, Road B curves closer to a North-South compass direction, therefore, Road A's approaches will be denoted as Northbound and Southbound.

The Approach Index is an integer starting a 1 used to distinguish multiple approaches with the same direction of travel. If there is only one approach per direction of travel for an intersection, then all approaches would use Approach Index equal to 1. Addition approaches would use sequential values 2, 3, 4, etc. Indexes are numbered in a clockwise fashion, starting with 1. For example, see the figure below. In this example, there are three eastbound approaches, Road A, Road B, and Road C. Approach Index 1 is given to the first approach (moving clockwise) and sequential values of 2 and 3 are given to the next two approaches moving clockwise around the intersection.
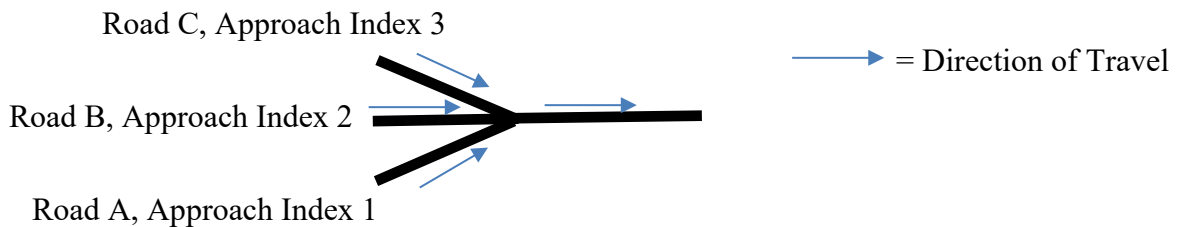
Road C, Approach Index 3

Road B, Approach Index 2

Road A, Approach Index 1

= Direction of Travel

Figure 2: Approach Indexing Example

An example of an Approach ID includes: ORC-0001-E1. This Approach ID is an eastbound approach, as indicated by the "E" and is the first eastbound approach as indicated by the "1" following the "E". The associated intersection has an Intersection ID of ORC-0001.

Lane Level Identifiers

ITSIQA uses a unique identifier for each lane within an approach, called Lane IDs. Lane IDs are based off the lane's approach's Approach ID and a lane number. The following is the format used for Lane IDs.

{Approach ID}-{One-Digit Lane Number}

The One-Digit Lane Number indicates the lane number of the specified lane. Lane numbers starts at 1 counting from the lane closest to the median. For example, the figure below depicts the Lane IDs for Approach ORC-0001-E1.
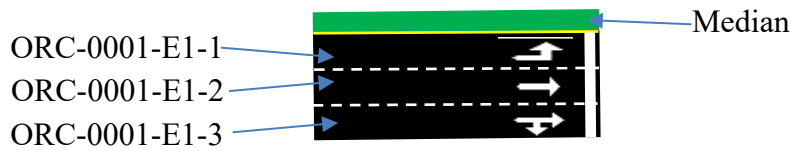
ORC-0001-E1-1 ———
ORC-0001-E1-2 ———
ORC-0001-E1-3 ———
——— Median

Figure 3: Example Lane IDs

In the example above, ORC-0001-E1-1 is the left turn only lane, located closest to the median, ORC-0001-E1-2 is the middle through lane, and ORC-0001-E1-3 is the through and right turn lane, located furthest from the median. Note that because the Lane IDs are based off the Approach ID, which is in turn based off the Intersection ID, then a lane's approach and intersection can be derived from the Lane ID. In the example above, these three lanes are a part of the first eastbound approach, ORC-0001-E1, within intersection ORC-0001, which is owned by Orange County, per the ORC code.

Revision Date: 10/14/2020