

# **City of Concord**

## **Technical Standards Manual**

### **Article VIII**

### **Traffic Impact Analysis (TIA)**

### **Appendix B**

### **TIA Scoping Document**



# City of Concord TIA Scoping Document

A Traffic Impact Analysis (TIA) is required for all proposed non-residential and mixed-use developments, all multi-family and single-family attached residential developments, and all other developments with six (6) or more total dwelling units. This document is used to determine the scope of a TIA when required. An NCDOT *Traffic Impact Analysis Need Screening / Scoping Request* should also be submitted if applicable.

**Project Name:** \_\_\_\_\_ **Previous Name (if applicable):** \_\_\_\_\_  
**Location:** \_\_\_\_\_

**Project Description** (*Attach additional pages if needed*):

\_\_\_\_\_  
 \_\_\_\_\_

<b>Project Contact:</b>	<b>Applicant</b>	<b>TIA Consultant</b>
<b>Company Name</b>		
<b>Contact Person</b>		
<b>Phone Number</b>		
<b>Email</b>		
<b>Mailing Address</b>		

**Site Plan and Access** – A Site Plan is required for TIA scoping. While the site plan may not be finalized during the TIA scoping stage, the graphic representation of the proposed development shall provide adequate details on the development scope and context. More specifically, the site plan/map shall clearly show the location and type of each access point, spacing to adjacent and opposing driveways or intersections, internal street network, any nearby interstate, US, NC or Secondary Roads (SR), proposed buildings/parcels with their anticipated uses and sizes at full build-out, and proposed phasing if applicable.

<b>Site Plan Prepared By:</b>	_____	<b>Site Plan Date:</b>	_____
<b>Parcel Size (Acres):</b>	_____	<b>Preliminary Master Plan Provided?</b>	_____
<b>Ex. Zoning:</b>	_____	<b>Proposed Zoning:</b>	_____
<b>Anticipated Build-Out Year</b>	_____	<b>Number of Phases:</b>	_____

**Application Type:** (*Rezoning, Special Use Permit, Driveway Permit, etc.*)

\_\_\_\_\_

# City of Concord TIA Scoping Document

**Trip Generation** – Use *ITE Trip Generation Handbook*, current edition. Do NOT adjust for pass-by, internal capture, or diverted trips. (Attach additional sheets if needed)

ITE LUC	Proposed Land Use	Size	Unit	Daily Trips	AM Peak Hour Trips			PM Peak Hour Trips			Data Source
					Enter	Exit	Total	Enter	Exit	Total	
<b>Total</b>											

Trip Generation should be in accordance with City of Concord Technical Standards Manual, Article VIII. NCDOT MSTTA calculator should be used for school sites.

**Annual Growth Factor to be used:**  %  
 Justification/Data Source:

**Identify site access** (Attach additional sheets if needed):

New Access	On Road	Access Type		Driveway Spacing		
	Road Name	Permitted Movements <sup>1</sup>	Traffic Control <sup>2</sup>	Distance (ft)	Direction	Nearest Intersection/Access
Access A						
Access B						
Access C						
Access D						
Access E						

Existing Access	Existing intersection of		Access Modification <sup>3</sup>	Proposed Interconnectivity (if applicable)		
	Road A	Road B		Connector #	Road Connected	Adjacent Development
Access 1				Connector 1		
Access 2				Connector 2		
Access 3				Connector 3		
Access 4				Connector 4		

<sup>1</sup>Conventional Full-Mvmt, Roundabout, RIRO, RIRO w/Left-Over, Median U-Turn, Other  
<sup>2</sup>Signal, 2-Way Stop, All-Way Stop, Yield, Uncontrolled  
<sup>3</sup>New Signal, New Roundabout, Mvmt Restriction, Other, N/A

**Trip Distribution:**

**Attach a graphic showing the proposed trip distribution throughout the Impact Analysis Area.**

# City of Concord TIA Scoping Document

City of Concord TIA Study Type Based on Trip Generation: [Please Select TIA Type.](#)

**Scenarios to be Analyzed:**

<input type="checkbox"/>	Existing Conditions Present Year:	<a href="#">Year</a>	<input type="checkbox"/>	Horizon Year (Build-Out + 5) w/o Dev.:	<a href="#">Year</a>
<input type="checkbox"/>	Full Build-Out Year w/out Dev.:	<a href="#">Year</a>	<input type="checkbox"/>	Horizon Year (Build-Out + 5) w/Dev.:	<a href="#">Year</a>
<input type="checkbox"/>	Full Build-Out Year w/Dev.:	<a href="#">Year</a>	<input type="checkbox"/>	NCDOT identified:	<a href="#">Year</a>
<input type="checkbox"/>	Build-Out Year for each Phase w/o Dev.:	<a href="#">Year</a>	<input type="checkbox"/>	Build-Out Year for each Phase w/Dev.:	<a href="#">Year</a>
<input type="checkbox"/>	CRMPO Long Range Plan year w/Dev.:	<a href="#">Year</a>	<input type="checkbox"/>	Other (attach description):	<a href="#">Year</a>

**Analysis Periods:**

<input type="checkbox"/>	Weekday AM Peak:	<input type="text"/>	<input type="checkbox"/>	Weekday PM Peak:	<input type="text"/>
<input type="checkbox"/>	Weekday Midday Peak:	<input type="text"/>	<input type="checkbox"/>	Weekday AM/PM School Peak:	<input type="text"/>
<input type="checkbox"/>	Weekend Peak:	<input type="text"/>	<input type="checkbox"/>	Other:	<input type="text"/>

**Compliance with Transportation Plan Notes:**


**Impact Analysis Area:** Attach a map identifying all intersections to be analyzed. *(Attach additional sheets if needed)*

External Intersection	Intersection of		Traffic <sup>1</sup> Control	Intersection Turning Movement Counts			Notes
	Road A	Road B		New/Existing	Date of Counts	Growth Adjustment	
1							
2							
3							
4							
5							
6							
7							
8							

  

Internal Intersection	Intersection of		Access Type		Intersection Spacing		
	Road A	Road B	Traffic Control <sup>1</sup>	Permitted Movements <sup>2</sup>	Distance (ft)	Direction	Nearest Intersection
101							
102							
103							
104							
105							

<sup>1</sup>Signal, 2-Way Stop, All-Way Stop, Yield, Uncontrolled  
<sup>2</sup>Conventional Full-Mvmt, Roundabout, RIRO, RIRO w/Left-Over, Median U-Turn, Other

# City of Concord TIA Scoping Document

The Following data will be collected:

- New traffic turning movement counts in 15-min intervals
- Roadway/Intersection Configuration & Traffic Control
- Traffic Signal Phasing & Timing Data
- Crash Data: Period - \_\_\_\_\_

Intersection Locations (use intersection or access numbers from tables) - \_\_\_\_\_

Street Segments:	Street -	_____	From:	_____	To:	_____
	Street -	_____	From:	_____	To:	_____

- Other: \_\_\_\_\_

**Traffic Signal and/or Multi-Way Stop Analyses:**

- Traffic Signal Warrant Analysis:  
Locations: \_\_\_\_\_

- Multi-Way Stop Warrant Analysis:  
Locations: \_\_\_\_\_

**Committed transportation improvements within the study area identified by City and/or NCDOT:**  
(type, location, anticipated start year of construction)

\_\_\_\_\_  
\_\_\_\_\_

**List of approved developments to include as committed project traffic in the TIA:**

\_\_\_\_\_  
\_\_\_\_\_

**Additional Comments:** (NCDOT TIA requirements, approved variations from TIA guidelines, etc.)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Submittals:**

The TIA Consultant shall provide at least one (1) electronic and one (1) hard copy of draft and final TIA Reports to the City Transportation Director at PO Box 308, Concord, NC 28026. If a TIA is identified for review by a pre-selected consultant, the Applicant shall also provide the number of hard and electronic copies as required by the review consultant. The TIA Consultant is responsible for providing required copies of TIAs to the NCDOT as applicable. Submittals to the City should include the TIA Submittal Checklist in Appendix H, Article VIII of the City of Concord Technical Standards Manual.

# City of Concord TIA Scoping Document

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## AGREEMENT BY ALL PARTIES

The undersigned agree to the contents and methodology described in this TIA Scoping Document and within Article VIII of the City of Concord Technical Standards Manual for completing the required TIA supportive of the development application identified herein. Any changes to the methodology or content contemplated by the Applicant or the TIA Consultant must be submitted, in writing, to the City Transportation Director and appropriate NCDOT representative, if applicable, and a revised TIA Scoping Document executed before such changes may be accepted for the TIA report. Subsequent revisions to the development plan (e.g. land use, density, site access, schedule, etc.) may require additional scoping and analysis, and may modify the TIA requirements.

This agreement shall become effective on the date approved by the City and shall expire nine (9) months from the effective date or upon changes to the roadway network and/or development assumptions which may alter the potential transportation system impacts, whichever occurs first. Once expired, renewal or re-scoping will be required prior to subsequent TIA submittals.

### APPLICANT

Signature	Printed Name	Date

### TIA CONSULTANT

Signature	Printed Name	Date

### NCDOT REPRESENTATIVE (if applicable)

Signature	Printed Name	Date

Email concurrence may be used in lieu of the signature

### CITY TRANSPORTATION REPRESENTATIVE

**Reviewed and approved by City Transportation on:** \_\_\_\_\_

Signature	Printed Name	Date