

TIA Worksheet & Report Checklist

Certification No.		Development Name:	
-------------------	--	-------------------	--

Review		TIA Worksheet Requirements	
Yes	N/A		
<input type="checkbox"/>	<input type="checkbox"/>	TIA Worksheet is submitted as a requirement for zoning, master planning, platting, and permitting.	
<input type="checkbox"/>	<input type="checkbox"/>	General Project Information (Project name, date, subdivision plat name, project address/location).	
<input type="checkbox"/>	<input type="checkbox"/>	Owner Information	
<input type="checkbox"/>	<input type="checkbox"/>	Preparer Information	
<input type="checkbox"/>	<input type="checkbox"/>	Scope meeting sheet is submitted with TIA Worksheet	
<input type="checkbox"/>	<input type="checkbox"/>	Whether or not a TIA Worksheet/Report was approved with the previous zoning/platting/permitting.	
<input type="checkbox"/>	<input type="checkbox"/>	Application Type or Reason for TIA Worksheet/Report	
<input type="checkbox"/>	<input type="checkbox"/>	TIA Submittal Type TIA Worksheet Only 100 peak hour trips or less, previous TIA report was approved, or previous TIA report not required. Level 1 TIA Report 101-500 peak hour trips. Level 2 TIA Report 501-1000 peak hour trips. Level 3 TIA Report 1001 or more peak hour trips.	
<input type="checkbox"/>	<input type="checkbox"/>	Proposed Land Use and Trip Information for Application	
<input type="checkbox"/>	<input type="checkbox"/>	Approved TIA Worksheet/Report (for applicants checking yes for "TIA Worksheet/Report approved with previous zoning, plan, plat or permit?")	
<input type="checkbox"/>	<input type="checkbox"/>	Update to and Status of Land Use and Trip Information for Total Development with Approved TIA Worksheet/Report (All Subdivision Units) (for applicants checking yes for "TIA Worksheet/Report approved with previous zoning, plan, plat or permit?")	
<input type="checkbox"/>	<input type="checkbox"/>	Approved TIA Worksheet/Report Conformance (for applicants checking yes for "TIA Worksheet/Report approved with previous zoning, plan, plat or permit?")	

		<p>If any changes have occurred that varies from the activity on which a previous TIA was approved, an amended TIA is required if the new activity places the project into a level different from the previous TIA or</p> <p><i>Level 3 TIA Report</i> It generates an increase of at least ten percent of the peak hour trips relative to the previous TIA.</p> <p><i>All other submittals</i> It generates an increase of at least 100 peak hour trips relative to the previous TIA.</p>
		Required TIA Mitigation Measures
Review		Level 1 TIA Report
Yes	N/A	
Report General Requirements		
		Signed and sealed by a professional engineer registered to practice in the state.
		TIA Report Level is identified in the report.
		TIA Report Level is correct.
Impact Area Requirements		
		Impact area contains the site and the area within the site and area one-quarter mile from the boundary of the site.
		Land use, site and study area boundaries (provide map).
		Existing site uses.
		Proposed site uses.
		Existing land uses on both sides of boundary streets for all parcels within the study area (provide map).
		All major driveways and intersecting streets adjacent to the property shall be illustrated in detail sufficient to serve the purposes of illustrating traffic function; this may include showing lane widths, traffic islands, medians, sidewalks, curbs, traffic control devices (traffic signs, signals, and pavements markings).
		A general description of the existing pavement condition of all major driveways and intersecting streets adjacent to the property.
		Photographs of adjacent streets of the development.

Trip Generation/Distribution/Assignment Requirements		
		The estimates of peak hour trips generated by the development during a street peak hour (provide table).
		Estimates for the percentage distribution of such trips from each site exit and to each site entrance (provide map).
Mitigation Requirements		
		Note to Reviewer: Voluntary efforts, beyond those herein required, to mitigate traffic impacts are encouraged as a means of providing enhanced traffic handling capabilities to users of the land development site as well as others. Traffic mitigation concepts include, but are not limited to, pavement widening, turn lanes, median islands, access controls, curbs, sidewalks, traffic signalization, traffic signing, pavement markings, etc.
		A TIA that contains a traffic impact mitigation for installation of a new traffic signal location shall include a traffic signal warrants analysis satisfying the requirements of the Texas Manual of Uniform Traffic Control Devices.
		Provide a narrative describing mitigation measures, conclusions and recommendations.
Review		Level 2 TIA Report
Yes	N/A	
Report General Requirements		
		Signed and sealed by a professional engineer registered to practice in the state.
		TIA Report Level is identified in the report.
		TIA Report Level is correct.
Impact Area Requirements		
		Impact area contains the site and the area within the site and area one-quarter mile up to a maximum of one mile from the boundary of the site as required by the city engineer.
		Land use, site and study area boundaries (provide map).
		Existing site uses.
		Proposed site uses.
		Existing land uses on both sides of boundary streets for all parcels within the study area (provide map).
		Proposed land uses on both sides of boundary streets for all parcels within the study area (provide map).

		Existing roadways and intersections of boundary streets within the study area of the subject property, including traffic conditions (provide map).
		Proposed roadways and intersections of boundary streets within the study area of the subject property, including traffic conditions (provide map).
		All major driveways and intersecting streets adjacent to the property shall be illustrated in detail sufficient to serve the purposes of illustrating traffic function; this may include showing lane widths, traffic islands, medians, sidewalks, curbs, traffic control devices (traffic signs, signals, and pavements markings).
		A general description of the existing pavement condition of all major driveways and intersecting streets adjacent to the property.
		Photographs of adjacent streets of the development.
		Aerial photograph showing the study area.

Trip Generation/Distribution/Assignment Requirements

		The trip generation summary table lists each type of land use.
		The trip generation summary table lists the building size assumed.
		The trip generation summary table lists the average trip generation rates used (total daily traffic and a.m./p.m. street peaks).
		The trip generation summary table lists the resultant total trips generated.
		Generated vehicular trip estimates may be discounted in recognition of other reasonable and applicable modes, e.g., transit, pedestrian, bicycles. Furthermore, trip generation estimates may also be discounted through the recognition of pass by trips and internal site trip satisfaction.
		Provide the estimates of percentage distribution of trips by turning movements to and from the proposed development by site access location (provide table and figure).
		Provide the direction of approach and departure of site traffic via the area's street system (provide figure by site entrance and boundary street).

Traffic Volume Requirements

		Projected traffic volumes (provide figure) for A.M. street peak hour site traffic (including turning movements).
		Projected traffic volumes (provide figure) for P.M. street peak hour site traffic (including turning movements).
		Projected traffic volumes (provide figure) for A.M. street peak hour total traffic including site-generated traffic and projected traffic (including turning movements).
		Projected traffic volumes (provide figure) for P.M. street peak hour total traffic including site-generated traffic and projected traffic (including turning movements).

		Projected traffic volumes (provide figure) during special situations where peak traffic typically occurs at non-traditional times, e.g., major sporting venues, large specialty Christmas stores, etc., any other peak hour necessary for complete analysis (including turning movements).
		Projected traffic volumes (provide figure) for total daily existing traffic for street system in study area.
		Projected traffic volumes (provide figure) for total daily existing traffic for street system in study area and new site traffic.
		Projected traffic volumes (provide figure) for total daily existing traffic for street system in study area plus new site traffic and projected traffic from build-out of study area land uses.
Capacity Analysis Requirements		
		Capacity analysis (the applicant shall provide analysis sheets in digital format)
		A capacity analysis shall be conducted for all public street intersections and junctions of major driveways with public streets which are significantly impacted within the study area boundary as defined in this section as agreed to by the developer's engineer and the city engineer.
		A capacity analysis is required for boundary streets for existing conditions, first phase, intermediate phase, and final phase.
		A capacity analysis is required for non-boundary streets within the study area for existing conditions and the final phase.
		Capacity analysis will follow the principles established in the latest edition of the Transportation Research Board's Highway Capacity Manual (HCM), unless otherwise directed by the city engineer. Capacity will be reported in quantitative terms as expressed in the HCM and in terms of traffic level of service based on control delay by movement or lane group.
		Capacity analysis will include traffic queuing estimates for all critical applications where the length of queues is a design parameter, e.g., auxiliary turn lanes, and at traffic gates.
Mitigation Requirements		
		If the proposed development would cause a reduction in the level of service for any roadway or intersection within the impact area that would cause the roadway to fall below the level of service C, the proposed development will be denied unless the levels of service for all roadways and intersections within the traffic impact analysis study are adequate to accommodate the impacts of such development.
		For phased construction projects, implementation of these traffic improvements must be accomplished no later than the completion of the project phase for which the capacity analyses show they are required. Plats for project phases subsequent to a phase for which a traffic improvement is required may be approved only if the traffic improvements are completed or secured as approved by the city engineer.
		Note to Reviewer: Voluntary efforts, beyond those herein required, to mitigate traffic impacts are encouraged as a means of providing enhanced traffic handling capabilities to users of the land development site as well as others. Traffic mitigation concepts include, but are not limited to, pavement widening, turn lanes, median islands, access controls, curbs, sidewalks, traffic signalization, traffic signing, pavement markings, etc.

		A TIA that contains a traffic impact mitigation for installation of a new traffic signal location shall include a traffic signal warrants analysis satisfying the requirements of the Texas Manual of Uniform Traffic Control Devices.
		Provide a narrative describing mitigation measures, conclusions and recommendations.
Review		Level 3 TIA Report
Yes	N/A	
Report General Requirements		
		Signed and sealed by a professional engineer registered to practice in the state.
		TIA Report Level is identified in the report.
		TIA Report Level is correct.
Impact Area Requirements		
		Impact area contains the site and the area within the site and area one mile from the boundary of the site.
		Land use, site and study area boundaries (provide map).
		Existing site uses.
		Proposed site uses.
		Existing land uses on both sides of boundary streets for all parcels within the study area (provide map).
		Proposed land uses on both sides of boundary streets for all parcels within the study area (provide map).
		Existing roadways and intersections of boundary streets within the study area of the subject property, including traffic conditions (provide map).
		Proposed roadways and intersections of boundary streets within the study area of the subject property, including traffic conditions (provide map).
		All major driveways and intersecting streets adjacent to the property shall be illustrated in detail sufficient to serve the purposes of illustrating traffic function; this may include showing lane widths, traffic islands, medians, sidewalks, curbs, traffic control devices (traffic signs, signals, and pavements markings).
		A general description of the existing pavement condition of all major driveways and intersecting streets adjacent to the property.
		Photographs of adjacent streets of the development.

		Aerial photograph showing the study area.
Trip Generation/Distribution/Assignment Requirements		
		The trip generation summary table lists each type of land use.
		The trip generation summary table lists the building size assumed.
		The trip generation summary table lists the average trip generation rates used (total daily traffic and a.m./p.m. street peaks).
		The trip generation summary table lists the resultant total trips generated.
		Generated vehicular trip estimates may be discounted in recognition of other reasonable and applicable modes, e.g., transit, pedestrian, bicycles. Furthermore, trip generation estimates may also be discounted through the recognition of pass by trips and internal site trip satisfaction.
		Provide the estimates of percentage distribution of trips by turning movements to and from the proposed development by site access location (provide table and figure).
		Provide the direction of approach and departure of site traffic via the area's street system (provide figure by site entrance and boundary street).
Traffic Volume Requirements		
		Projected traffic volumes (provide figure) for A.M. street peak hour site traffic (including turning movements).
		Projected traffic volumes (provide figure) for P.M. street peak hour site traffic (including turning movements).
		Projected traffic volumes (provide figure) for A.M. street peak hour total traffic including site-generated traffic and projected traffic (including turning movements).
		Projected traffic volumes (provide figure) for P.M. street peak hour total traffic including site-generated traffic and projected traffic (including turning movements).
		Projected traffic volumes (provide figure) during special situations where peak traffic typically occurs at non-traditional times, e.g., major sporting venues, large specialty Christmas stores, etc., any other peak hour necessary for complete analysis (including turning movements).
		Projected traffic volumes (provide figure) for total daily existing traffic for street system in study area.
		Projected traffic volumes (provide figure) for total daily existing traffic for street system in study area and new site traffic.
		Projected traffic volumes (provide figure) for total daily existing traffic for street system in study area plus new site traffic and projected traffic from build-out of study area land uses.
Capacity Analysis Requirements		
		Capacity analysis (the applicant shall provide analysis sheets in digital format)

		A capacity analysis shall be conducted for all public street intersections and junctions of major driveways with public streets which are significantly impacted within the study area boundary as defined in this section as agreed to by the developer's engineer and the city engineer.
		A capacity analysis is required for boundary streets for existing conditions, first phase, intermediate phase, and final phase.
		A capacity analysis is required for non-boundary streets within the study area for existing conditions and the final phase.
		Capacity analysis will follow the principles established in the latest edition of the Transportation Research Board's Highway Capacity Manual (HCM), unless otherwise directed by the city engineer. Capacity will be reported in quantitative terms as expressed in the HCM and in terms of traffic level of service based on control delay by movement or lane group.
		Capacity analysis will include traffic queuing estimates for all critical applications where the length of queues is a design parameter, e.g., auxiliary turn lanes, and at traffic gates.

Mitigation Requirements

		If the proposed development would cause a reduction in the level of service for any roadway or intersection within the impact area that would cause the roadway to fall below the level of service C, the proposed development will be denied unless the levels of service for all roadways and intersections within the traffic impact analysis study are adequate to accommodate the impacts of such development.
		For phased construction projects, implementation of these traffic improvements must be accomplished no later than the completion of the project phase for which the capacity analyses show they are required. Plats for project phases subsequent to a phase for which a traffic improvement is required may be approved only if the traffic improvements are completed or secured as approved by the city engineer.
		Note to Reviewer: Voluntary efforts, beyond those herein required, to mitigate traffic impacts are encouraged as a means of providing enhanced traffic handling capabilities to users of the land development site as well as others. Traffic mitigation concepts include, but are not limited to, pavement widening, turn lanes, median islands, access controls, curbs, sidewalks, traffic signalization, traffic signing, pavement markings, etc.
		A TIA that contains a traffic impact mitigation for installation of a new traffic signal location shall include a traffic signal warrants analysis satisfying the requirements of the Texas Manual of Uniform Traffic Control Devices.
		Provide a narrative describing mitigation measures, conclusions and recommendations.

I hereby confirm that this checklist is complete and all required information is attached.

Signature of Owner/Applicant

Signature of Licensed Engineer

Signature of Owner/Applicant

Signature of Licensed Engineer

Date

City of New Braunfels

Date

8

Revised 2019-10-07