



City of San Antonio

Agenda Memorandum

File Number:17-4338

Agenda Item Number: 3.

Agenda Date: 8/30/2017

In Control: Governance Committee

DEPARTMENT: Transportation and Capital Improvements

DEPARTMENT HEAD: Mike Frisbie, P.E

COUNCIL DISTRICTS IMPACTED: Citywide

SUBJECT:

Use of NACTO Design Guidelines

SUMMARY:

On June 27, 2017, Council member Shirley Gonzales issued a Council Consideration Request requesting the use of National Association of City Transportation Officials (NACTO) design guidelines as a requirement for 2017 Bond transportation projects and including the revision of the City San Antonio Design Guidance Manual (DGM) to incorporate NACTO and Vision Zero.

BACKGROUND INFORMATION:

San Antonio became a member city of NACTO in 2016. NACTO is a 501(c) (3) non-profit association whose mission is to build cities as places for people, with safe, sustainable, accessible, and equitable transportation choices that support a strong economy and vibrant quality of life. There are currently twenty-three (23) member cities including San Antonio, and twenty-seven (27) affiliate member cities who are members but do not participate on the Policy Board.

Previously, San Antonio adopted a Complete Streets policy in 2012 and a Vision Zero policy in 2015. By these actions, and joining NACTO, San Antonio has expressed its commitment to improving safety and accessibility for all road users, to include pedestrians, cyclists, transit riders, and motor vehicle occupants. However, consistent traffic fatality and serious injury rate reductions have not yet been realized. The table below shows the number of fatalities over the last three years by mode of transportation. Year 2016 saw a significant increase in overall fatalities; however, this is consistent with national trends from 2016.

Year	Vehicle	Motorcycle	Pedestrian	Bicycle	Total	% Change
2014	80	19	54	1	154	---
2015	80	25	46	3	154	0%
2016	95	28	65	5	193	25%

The table below compares the number of fatalities by mode of transportation from January through June for 2016 and 2017. Thus far, 2017 has a significant reduction in overall fatalities from 2016.

Year	Vehicle	Motorcycle	Pedestrian	Bicycle	TOTAL	% Change
2016	53	12	29	4	98	---
2017	42	5	9	1	57	-42%

There are a variety of guides and manuals that assist the transportation engineering industry in implementing the safest and most effective projects. TCI uses the resources found in the American Association of State Highway Transportation and Officials (AASHTO) design standards as well as the City of San Antonio Unified Development Code (UDC). The references approved in the UDC, including NACTO, are based upon input by experts in transportation engineering that understand the design and safety requirements of project development.

The City San Antonio Design Guidance Manual (DGM), most recently revised in 2012, provides an outline of required deliverables that must be provided to TCI when engineering design or studies are completed. The DGM also explains how each element is vital to a complete design. The DGM serves as a reference book to existing design codes and outlines the steps of project preparation for capital improvement projects. The DGM is currently being revised to include updated information for the delivery of the 2017 Bond projects.

ISSUE:

The Council Consideration Request included the following three items for consideration:

1. Direct TCI to utilize National Association of City Transportation Officials (NACTO) design guides as a primary requirement for transportation project design, beginning with all acquisition requests associated with 2017-2022 Bond projects.
2. Direct TCI to revise the City of San Antonio Design Guidance Manual to reflect the principles of Vision Zero, specify safety as the highest priority for transportation system design, minimize level of service and traffic flow as transportation system priorities, and institutionalize the use of NACTO design guides.
3. Direct TCI to establish a formal, sustained training program for City employees, consultants and contractors involved with engineering, design, construction and maintenance of streets to improve the safety of city streets and the accommodation of alternative travel modes.

NACTO Design Guides (Item 1):

NACTO is a tool that supplements AASHTO in bringing innovative design that modifies streetscape to emphasize alternate modes of transportation. This guide, however, does not always take into full consideration roadway geometrics that are required by national standards. All design references must work in concert to provide the best roadways to the citizens of San Antonio.

TCI currently incorporates NACTO guidelines in many aspects of infrastructure projects. Specifically, NACTO has been used as a resource for best practices for bicycle and pedestrian infrastructure (Vision Zero). Additionally, during the scoping process of the proposed 2017 Bond projects, transportation planners within TCI reviewed each project for opportunities to use NACTO guidelines. It is the intent of TCI to implement all practicable NACTO recommendations that can be accommodated by the available right-of-way or construction constraints.

In the cases of leveraged projects with federal funding, design standards that are approved by Federal Highway Administration (FHWA) will need to be followed to ensure receipt of federal funding. Additionally, all transportation programs and grants administered through the Alamo Area Metropolitan Planning Organization (AAMPO) are mandated to follow AASHTO standards. Currently, TCI has \$64 million of leveraged funding in the 2017 Bond Street projects that would no longer be eligible for federal funding if TCI adheres to NACTO standards as a primary resource.

TCI will continue to support incorporating NACTO recommendations on capital improvement projects. However, it is difficult to require many of the recommendations with private developers due the current roadway and right-of-way criteria included in the City of San Antonio Unified Development Code. The UDC currently cites NACTO as a reference for bicycle facilities; however, it is seldom possible to implement best practices such as buffered bicycle lanes with the limited right-of-way required by the UDC. There is a need to modify UDC to create larger right-of-way options and require different roadway cross-sections. The next planned UDC amendments are in 2020.

City of San Antonio Design Guidance Manual (Item 2):

The City of San Antonio Design Guidance Manual (DGM) is currently being revised to include updated information for the delivery of the 2017 Bond projects. TCI will incorporate the guiding principles of NACTO's "Urban Street Design Guide" into the DGM updates. Principles such as safety and context will be emphasized so that our transportation projects create the opportunity for a more livable and economically vibrant community. The DGM updates are planned to be complete in 2017.

Training (Item 3):

Since becoming a Vision Zero city in 2015, TCI has already hosted several training sessions emphasizing safety for all roadway users. Included in the inter-departmental trainings were engineering and planning staff from TCI, the Department of Planning & Community Development, and the Development Services Department.

TCI is currently in negotiation with NACTO to bring official training to San Antonio in early December. The training is \$16,000 and accommodates 40 people. We hope to expand training in the future outside consultants and agencies as funding becomes available in future transportation planning budgets.

ALTERNATIVES:

There are no alternatives associated with this briefing.

FISCAL IMPACT:

There is no fiscal impact associated with this briefing.

RECOMMENDATION:

TCI recommends continuing to utilize AASHTO and FHWA guidelines as the primary technical resource for transportation engineering and incorporating the guiding principles of NACTO's "Urban Street Design Guide" into the on-going City of San Antonio Design Guidance Manual (DGM) updates for the delivery of the 2017 Bond projects. It is the intent of TCI to implement all practicable NACTO recommendations that can be accommodated by the available right-of-way or construction constraints.