#### Moyer, Laurie

From:	Vij, Rohit
Sent:	Wednesday, March 14, 2018 8:17 PM
То:	Moyer, Laurie
Subject:	RE: SMTX Transportation Masterplan Comments

My responses are in highlighted text (red).

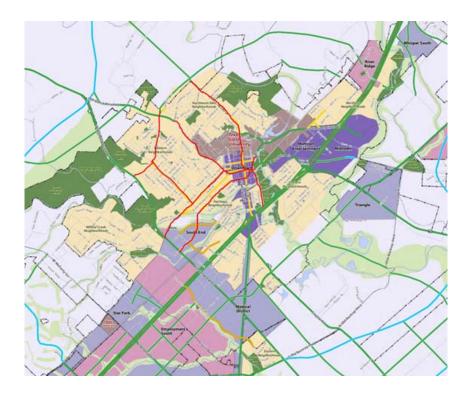
To the San Marcos Engineering and Capital Improvements Department:

I would like to provide the following four comments regarding the San Marcos Transportation Master Plan. The first two are in regards to the overall plan, while the latter focus on the South End area of the TMP.

#### **Overall Plan Commentary**

1. The proposed maps show a void of protected and/or buffered bike lane routes between downtown and throughout the entire southwest side of town, where many residents currently live and would benefit the most. This is an imbalance compared to the rest of the plan which shows a swatch of protected lanes cutting across rural undeveloped lands on the south east side of town (useful for planning purposes but not a near term priority).

I would recommend prioritizing a network of streets through this area of town to have dedicated bike lanes, including Hopkins, San Antonio, Bishop, Craddock, Stagecoach to MLK, LBJ and CM Allen Parkway. For instance, protected bike lanes on Hopkins would slow down traffic - a constant complaint on this road because lane widths are currently exceedingly large - and most importantly, would connect City Park with Purgatory Park, arguably the city's best park assets. The screenshot below shows red lines drawn on a suggested network of protected bike lanes in the southwest sector of town, all of which have very wide travel lanes that could be simply restriped in many instances to include bike lanes while also calming traffic and increasing safety.



Bike infrastructure plan was developed while considering several factors including, future traffic volumes, adjacent land use, existing/proposed bike traffic demand, ROW requirements etc. Confined ROW and future traffic volumes along Hopkins Street, Old RR 12, LBJ north of Sessom Dr and Bishop Street doesn't allow the City to construct protected bike lanes. However protected bike lanes can be provided on MLK. The City is currently developing a plan to provide buffered bike lanes on LBJ and Guadalupe Street.

2. In reviewing the open house presentation, the TMP cross sections for inner city streets (boulevards through residential streets) list lane widths that do not align with the street types in CodeSMTX or current planning policy surrounding vehicular movement in cities, which is to slow cars down to encourage safer streets for not only other cars but pedestrians and bikers. 11' lane widths and greater have been found to cause greater crash rates and higher impact speeds and the National Association of Transportation Officials (NACTO) states that 10' lane widths are appropriate in urban areas (versus the 11' - 13' lane widths that have historically been used in cities and are currently listed on the TMP cross-sections presentation, screen shot below). 10' lane widths have a positive impact on the safety of streets for other cars as well as pedestrians and bikers, particularly when speeds are 35 mph and below. I strongly encourage the City to revise these proposed cross sections to reflect the goals of walkability embedded in CodeSMTX as well as make San Marcos a safer place for all modes of traffic.

Link to NACTO's informational site on lane widths and safety: <u>https://nacto.org/publication/urban-street-design-guide/street-design-elements/lane-width/</u>

Roadway Classification	No. of Lanes	Anticipated Daily Traffic Volumes	Target Speed, mph	Lane Widths	On-Street Parking	Median	Right-of- Way	Bike Facility Type	Sidewalk Width	Shared Use Path
Highway	4	15,000 - 35,000	45	12'	No	Yes	150'	Off-Street	12'	Yes
Boulevard	6	25,000 - 40,000	35	11'-12.5'	No	Yes	125-150'	Off-Street	10.5'-12'	Yes
Boulevard	4	12,000 - 30,000	35	11'-12.5'	Varies	Yes	100'-125'	Cycle Track/Off-Street	5-7	Optional
Boulevard		6,000 - 15,000	30-35	12.5	Yes	Yes	100'	Cycle Track	5'	No
Avenue	4	10,000 - 20,000	30-35	11'-12.5'	No	No	100'	One-Way CT	6.5'	Optional
Avenue	3	4,000 - 15,000	30-35	11'-12.5'	Yes	No	82'-100'	Cycle Track/Off-Street	6.5'-14.5'	Optional
Commercial Street	2	Less than 10,000	25-30	10'-13.5'	Yes	No	60'-100'	Cycle Track/Shared Lane	5'-15'	No
Residential Street	1-2	Less than 1,000	20-25	10'-12'	Yes	No	50'-70'	Off-Street/Shared Lane	41	No
Queuing Road	1	Less than 1,000	25	18'	No	No	40'-50'	N/A		No
Rear Alley/Lane	1		15	15'-24'	No	No	20'-24'	N/A		No

11' minimum lane widths were proposed after having in-depth discussions with other City departments such as police, fire and emergency management. Initially narrower lane widths were proposed, however the minimum width was revised to accommodate fire truck and other emergency management services.

### South End Specific Commentary

3. In the South End, I do not recommend placing an avenue along Purgatory creek, which includes more sensitive riparian areas that flow to the San Marcos river. The southeastern part of the route appears to go through an existing detention area, as well. Emphasizing the cross connection between Gravel road and Dutton Drive takes away from the prioritization and importance of the Stagecoach Trail to MLK connection. The new CodeSMTX would allow for a more defined road network that is sensitive to the site constraints and any Gravel street connection would be better indicated as a pedestrian and cycling trail crossing - not a vehicular

thoroughfare - to indicate more sensitive traffic parallel to the creek network. Screenshot below of this suggestion below.



The proposed thoroughfares/connections were developed based on the traffic demand model results. A new roadway/connection was proposed where capacity of an existing roadway exceeded the traffic demand. In order to mitigate congestion in future another route was proposed such as gravel road extension to Dutton drive. It will relieve traffic congestion on Hopkins and San Antonio Street in future.

4. Similar to the comment above, I do not recommend placing an avenue extension across the rail road tracks between Dutton Drive, Bintu Road and Kingwood Street. This would require significant infrastructure investment since it would require traversing both Willow Springs Creek, as well as a railroad and does not feel necessary, particularly because the uses on I-35 are more industrial in nature. I would suggest placing a less-intensive pedestrian and cycling connection across the street and railroad tracks instead which would connect to a street (not an avenue) between Bintu and Kingwood. This would allow for low-intensity foot traffic between the pockets of single-family uses and the South End area while connecting the neighborhood between the railroad tracks and I-35. Screenshot of this suggestion below.

Same as response above, these connections were proposed based on the traffic demand model results. The alignment of these proposed roadways will be evaluated in future.

Thanks,

## Rohit Vij, M.Sc., P.E., PMP

Senior Engineer | Capital Improvements/Engineering | City of San Marcos 630 E Hopkins | San Marcos, TX 78666 (512) 393-8133 W | RVij@sanmarcostx.gov

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From: Moyer, Laurie
Sent: Wednesday, March 14, 2018 1:43 PM
To: Vij, Rohit <RVij@sanmarcostx.gov>
Subject: FW: SMTX Transportation Masterplan Comments
Importance: High

Please work on responses below and send to me. Thanks!

### Laurie A Moyer, P.E.

Director of Engineering and Capital Improvement | Capital Improvements/Engineering | City of San Marcos 630 E Hopkins | San Marcos, TX 78666 (512) 393-8132 W | Imoyer@sanmarcostx.gov

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From: Sarah Simpson <<u>ssimpson@color-space.com</u>>
Sent: Friday, October 27, 2017 10:41 AM
To: Engineering Information <<u>EngInfo@sanmarcostx.gov</u>>
Cc: City Manager Information <<u>CityManagerInfo@sanmarcostx.gov</u>>
Subject: SMTX Transportation Masterplan Comments

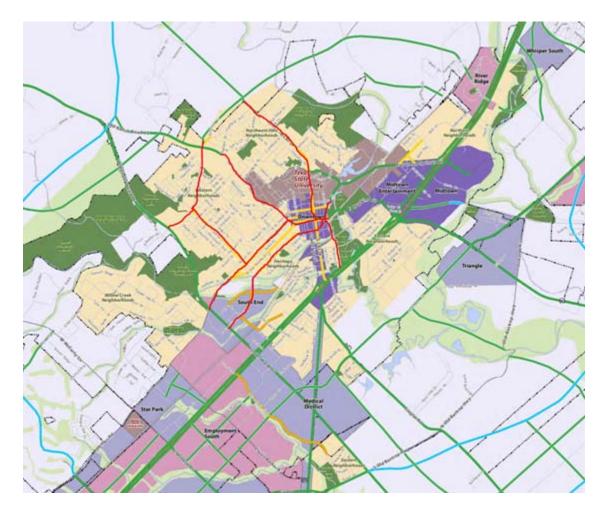
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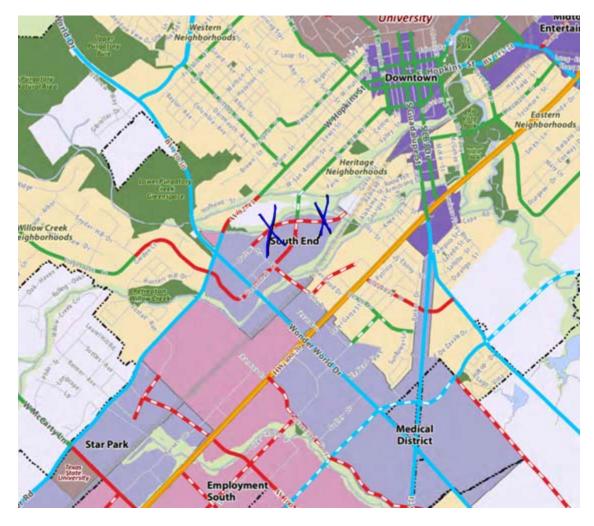
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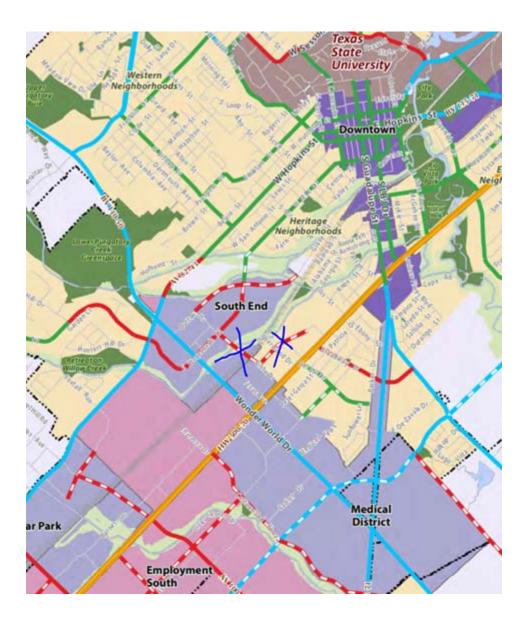
	Daily Traffic Volumes	Speed, mph	Lane Widths	On-Street Parking	Median	Right-of- Way	Bike Facility Type	Sidewalk Width	Shared Use Path
4	15,000 - 35,000	45	12'	No	Yes	150'	Off-Street	12'	Yes
6	25,000 - 40,000	35	11'-12.5'	No	Yes	125-150'	Off-Street	10.5'-12'	Yes
4	12,000 - 30,000	35	11'-12.5'	Varies	Yes	100'-125'	Cycle Track/Off-Street	5'-7'	Optional
	6,000 - 15,000	30-35	12.5	Yes	Yes	100'	Cycle Track	5'	No
4	10,000 - 20,000	30-35	11'-12.5'	No	No	100'	One-Way CT	6.5'	Optional
3	4,000 - 15,000	30-35	11'-12.5'	Yes	No	82'-100'	Cycle Track/Off-Street	6.5'-14.5'	Optional
2	Less than 10,000	25-30	10'-13.5'	Yes	No	60'-100'	Cycle Track/Shared Lane	5'-15'	No
1-2	Less than 1,000	20-25	10'-12'	Yes	No	50'-70'	Off-Street/Shared Lano	41	No
1	Less than 1,000	25	18'	No	No	40'-50'	N/A		No
	4 2 4 3 2 1-2	<ul> <li>4 12,000-30,000</li> <li>2 6,000-15,000</li> <li>4 10,000-20,000</li> <li>3 4,000-15,000</li> <li>2 Loss than 10,000</li> <li>1-2 Less than 1,000</li> </ul>	4       12,000 - 30,000       35         2       6,000 - 15,000       30-35         4       10,000 - 20,000       30-35         3       4,000 - 15,000       30-35         2       Less than 10,000       25-30         1-2       Less than 1,000       20-25	4       12,000 - 30,000       35       11' - 12.5'         2       6,000 - 15,000       30 - 35       12.5         4       10,000 - 20,000       30 - 35       11' - 12.5'         3       4,000 - 15,000       30 - 35       11' - 12.5'         2       Less than 10,000       25 - 30       10' - 13.5'         1-2       Less than 1,000       20 - 25       10' - 12'	4       12,000 · 30,000       35       11' · 12.5'       Varies         2       6,000 · 15,000       30 · 35       12.5       Yes         4       10,000 · 20,000       30 · 35       11' · 12.5'       No         3       4,000 · 15,000       30 · 35       11' · 12.5'       Yes         2       Less than 10,000       25 · 30       10' · 13.5'       Yes         1·2       Less than 1,000       20 · 25       10' · 12'       Yes	4       12,000-30,000       35       11'-12.5'       Varies       Yes         2       6,000-15,000       30-35       12.5       Yes       Yes         4       10,000-20,000       30-35       11'-12.5'       No       No         3       4,000-15,000       30-35       11'-12.5'       Yes       No         2       Less than 10,000       25-30       10'-13.5'       Yes       No         1-2       Less than 1,000       20-25       10'-12'       Yes       No	4       12,000-30,000       35       11'-12.5'       Varies       Yes       100'-125'         2       6,000-15,000       30-35       12.5       Yes       Yes       100'         4       10,000-20,000       30-35       11'-12.5'       No       No       100'         3       4,000-15,000       30-35       11'-12.5'       Yes       No       82'-100'         2       Less than 10,000       25-30       10'-13.5'       Yes       No       60'-100'         1-2       Less than 1,000       20-25       10'-12'       Yes       No       50'-70'	4       12,000-30,000       35       11'-12.5'       Varies       Yes       100'-125'       Cycle Track/Off-Street         2       6,000-15,000       30-35       12.5       Yes       Yes       100'       Cycle Track/Off-Street         4       10,000-20,000       30-35       11'-12.5'       No       No       100'       One-Way CT         3       4,000-15,000       30-35       11'-12.5'       Yes       No       82'-100'       Cycle Track/Off-Street         2       Less than 10,000       25-30       10'-13.5'       Yes       No       60'-100'       Cycle Track/Off-Street Lane         1-2       Less than 1,000       20-25       10'-12'       Yes       No       50'-70'       Off-Street/Shared Lane	4       12,000-30,000       35       11'12.5'       Varies       Yes       100'-125'       Cycle Track/Off-Street       5'-7'         2       6,000-15,000       30-35       12.5       Yes       Yes       100'       Cycle Track/Off-Street       5'         4       10,000-20,000       30-35       11'12.5'       No       No       100'       One-Way CT       6.5'         3       4,000-15,000       30-35       11'12.5'       Yes       No       82'-100'       Cycle Track/Off-Street       6.5'-14.5'         2       Less than 10,000       25-30       10'-13.5'       Yes       No       60'-100'       Cycle Track/Shared Lane       5'-15'         1-2       Less than 1,000       20-25       10'-12'       Yes       No       50'-70'       Off-Street/Shared Lane       4'

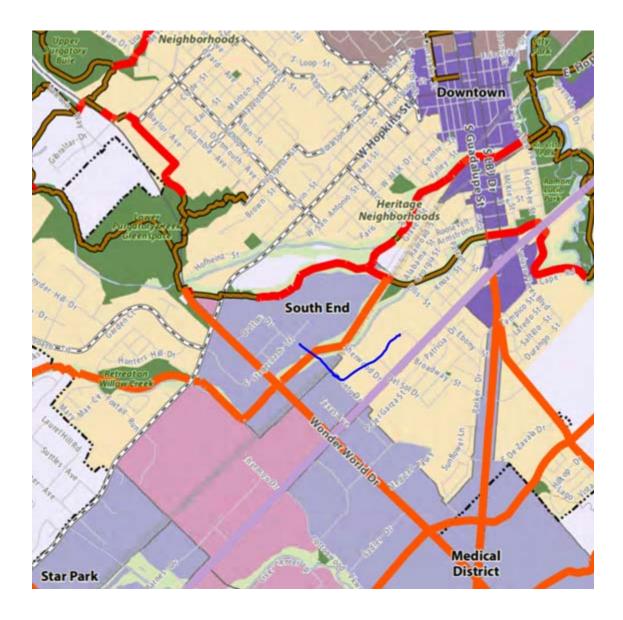
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Thank you and best,

### Sarah Simpson, RA, LEED GA

Principal Architect | Colorspace 407 Stagecoach Trail, Ste 203 San Marcos, TX 78666 <u>512.395.5038</u> <u>ssimpson@color-space.com</u> | @color.space

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