

## Moyer, Laurie

---

**From:** Vij, Rohit  
**Sent:** Monday, April 16, 2018 3:27 PM  
**To:** Moyer, Laurie  
**Subject:** RE: SMTX Transportation Masterplan Comments

My responses are in **red**.

To the San Marcos Engineering Department:

Upon further review of the draft Transportation Master Plan (TMP) materials over the last two weeks, I wanted to provide the following additional comments for inclusion into the public review process. Thank you in advance for your review of these additional items.

### General Draft TMP Commentary

- The TMP review materials would benefit from cost comparisons of current versus proposed ROW cross-section construction. Auto-lane also do not appear to cede enough width to create complete and efficient streets as in some cases ROWs are just becoming wider and costlier with more impervious cover.
  - ***Recommend that cost comparisons be provided for review and that new cross-sections be accommodated within existing standard ROW widths.***
  - ***Cost comparisons of existing and proposed cross-sections were not performed as part of TMP. For all existing roadways, retrofitted cross sections were developed to maintain the existing ROW.***
  - It is unclear how the TMP ROW cross-sections interface with the cross-sections in Chapter 3 of CodeSMTX, why there are slight variations between the two, and why there would be a need for two different sets of standards.
  - ***Recommend that the same ROW cross-sections for the TMP and CodeSMTX be used and not duplicated.***
  - ***TMP and CodeSMTX cross-sections are exactly the same for major thoroughfares including Parkways, Boulevards, Avenues and Commercial Streets. CodeSMTX has developed some additional cross-sections for neighborhood streets and are not included in TMP.***
  - Bus routes and stops for both CARTS and TXST are not represented on any of the plans, showing a lack of concurrent multimodal planning and making it more of a ROW master plan than a true Transportation Master Plan.
  - ***Recommend adding a fourth "Public Transit Plan" map to ensure that public transportation is part of this planning effort.***
  - ***TMP report specifically talks about multimodal transportation including transit in sections "Existing Conditions", and "Recommendations". Under existing conditions section, the report includes a map illustrating CARTS as well as Bobcat Shuttle routes. Under recommendations section, the report included a transit vision with goals, objectives, recommendations and proposed transit network map.***
  - Outside of summary presentations and the three proposed plans, it does not appear that a full report has been posted for Public Review, making it difficult to understand the intent and timeline of the TMP, as well as its fulfillment of the goals of the Comprehensive Plan.
  - ***Recommend revising the adoption timeline to allow for the release of a complete TMP document with a 60-day public comment period before voting on the adoption of the TMP.***

- *In March, 2018, the City posted the TMP report final draft online for public view. In addition to the report, thoroughfare plan, bike infrastructure plan and greenways plan was also posted online for public view*

### **Thoroughfare Plan and Associated Cross Sections**

- A wide-flung network of ring roads throughout the entire ETJ (notably in the SE quadrant and the proposed NW Loop and Craddock Extension) encourage agricultural and natural land conversion to low-density sprawl. This proliferation of ETJ roads is antithetical to the concept of "compact and connected growth," and showing these roads with equal emphasis as roads within the existing City Limits on the plan conflicts with the goals of the Preferred Scenario Map embedded within the Comprehensive Plan.
- **Recommend removing the excessive ring roads from the Thoroughfare Plan and placing emphasis instead on growth and improvements that reinforce the Preferred Scenario Map.**
- *Preferred scenario map as well as intensity zones population and employment forecast were used to develop thoroughfares within and adjacent to these zones. The proposed thoroughfare plan was developed to support preferred scenario map as well as dense developments (compact and connected growth) planned within intensity zones. SE quadrant of the City is not developed, however showing these roadways on thoroughfare plan will help the City in protecting ROW; in case any development is proposed in future.*
- Several important roads that run through the existing City are currently owned by TXDOT which creates conflicts in objectives - but no distinction is noted in the TMP plans for these roads nor timeframes for the City to take over their ownership. Further, some of these core roads are noted in Capital Improvement Projects as being prioritized for "capacity enhancements" which conflict with the goals of creating Complete Streets, as well as citizen desires.
- **Recommend distinguishing TXDOT-owned thoroughfares and outlining a plan for eventual City control; and eliminating capacity enhancement projects for roads that run through the existing city core and instead focus resources in these areas on Complete Street conversions and speed reductions for safety, liveability.**
- *The City is currently working with TxDOT on transferring ownership of some of the major thoroughfares from TxDOT to the City. Capacity enhancements to these roadways are required to accommodate future traffic growth.*
- Additional cross-section comments:
  - **Recommend reducing proposed lane widths to 10' for 35 mph and less roadways to improve safety, as well as reduce impervious cover.**
  - *10' lane widths for roadways with 35MPH or less posted speed limit were discussed internally with all concerned departments. However, 10' lane widths were not recommended for any cross-section due to the traffic operations and safety issues raised by concerned departments.*
  - **Recommend adding cross-sections to both the TMP and CodeSMTX that incorporate stormwater biofilters / retention in ROW versus typical crowned vegetated strips.**
  - *TMP cross sections are conceptual and stormwater facilities including water quality features will be considered during the preliminary/detailed design phase.*

### **Bike Plan**

- As noted in my previous comments, the plan lacks connected and dedicated bike lanes in large portions of the existing town. I am reemphasizing this point as these missing routes are critical for shorter, in-town commuter routes versus the plan's current focus on long-distance, regional routes and recreational shared-use trails / greenways. Studies show that dedicated bike lanes are critical to increasing bike ridership ([such as this report](#)) and particularly for women ([as shown in this report](#)).

- **Recommend adding dedicated and connected bike lane routes through existing neighborhoods throughout town, such as along Bishop, Craddock, RR12, Holland, Hopkins, Hunter, MLK, LBJ, Stagecoach, River Road, Thorpe, Mill, etc.**
- The plan shows an over-dependence on sharrows instead of protected and/or buffered bike lanes. Sharrows do not increase safety or ridership ([as noted in this report](#)) and a review of speed/volume relationship to bike facilities per TMP presentation materials indicates a need for bike lanes on roadways with speeds of 18.5 to 35 mph.
- **Recommend utilizing protected bike lanes or at least buffered bike lanes on connected, dedicated bike routes to increase biker safety, awareness and ridership.**
- *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.*
- 

### Trails / Greenways Plan

- Inconsistent nomenclature between "trails" and "greenways" is confusing.
- **Recommend making terms consistent for clarity.**
- Plan does not currently show zones of proposed natural lands to be acquired along future trail network.
- **Recommend adding a layer for proposed natural land acquisition / easements that create a robust buffer along the proposed trail network and clearly outline dedication strategies.**
- *Land acquisition along trails/greenways are not finalized yet, and therefore can't be added to greenways master plan as a layer.*

**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](mailto:RVij@sanmarcostx.gov)



[Website](#) | [Facebook](#) | [Twitter](#) | [Instagram](#)

**From:** Moyer, Laurie

**Sent:** Sunday, April 15, 2018 6:11 PM

**To:** Vij, Rohit <[RVij@sanmarcostx.gov](mailto:RVij@sanmarcostx.gov)>

**Subject:** FW: SMTX Transportation Masterplan Comments

This is a different email for you to take a crack at the response. Can you complete by Tuesday?

**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 | [lmoyer@sanmarcostx.gov](mailto:lmoyer@sanmarcostx.gov)

Disclaimer: The content of this e-mail is intended solely for the use of the individual or entity to whom it is addressed. If you have received this communication in error, be aware that forwarding it, copying it, or in any way disclosing its content to any other person, is strictly prohibited. If you have received this communication in error, please notify the author by replying to this e-mail immediately.

---

**From:** Sarah Simpson <[ssimpson@color-space.com](mailto:ssimpson@color-space.com)>

**Sent:** Wednesday, November 8, 2017 6:40 PM

**To:** Engineering Information <[EngInfo@sanmarcostx.gov](mailto:EngInfo@sanmarcostx.gov)>

**Cc:** City Manager Information <[CityManagerInfo@sanmarcostx.gov](mailto:CityManagerInfo@sanmarcostx.gov)>; Moyer, Laurie <[lmoyer@sanmarcostx.gov](mailto:lmoyer@sanmarcostx.gov)>

**Subject:** Re: SMTX Transportation Masterplan Comments

To the San Marcos Engineering Department:

Upon further review of the draft Transportation Master Plan (TMP) materials over the last two weeks, I wanted to provide the following additional comments for inclusion into the public review process. Thank you in advance for your review of these additional items.

### **General Draft TMP Commentary**

- The TMP review materials would benefit from cost comparisons of current versus proposed ROW cross-section construction. Auto-lane also do not appear to cede enough width to create complete and efficient streets as in some cases ROWs are just becoming wider and costlier with more impervious cover.
  - ***Recommend that cost comparisons be provided for review and that new cross-sections be accommodated within existing standard ROW widths.***
  - It is unclear how the TMP ROW cross-sections interface with the cross-sections in Chapter 3 of CodeSMTX, why there are slight variations between the two, and why there would be a need for two different sets of standards.
  - ***Recommend that the same ROW cross-sections for the TMP and CodeSMTX be used and not duplicated.***
  - Bus routes and stops for both CARTS and TXST are not represented on any of the plans, showing a lack of concurrent multimodal planning and making it more of a ROW master plan than a true Transportation Master Plan.
  - ***Recommend adding a fourth "Public Transit Plan" map to ensure that public transportation is part of this planning effort.***
  - Outside of summary presentations and the three proposed plans, it does not appear that a full report has been posted for Public Review, making it difficult to understand the intent and timeline of the TMP, as well as its fulfillment of the goals of the Comprehensive Plan.
  - ***Recommend revising the adoption timeline to allow for the release of a complete TMP document with a 60-day public comment period before voting on the adoption of the TMP.***

### **Thoroughfare Plan and Associated Cross Sections**

- A wide-flung network of ring roads throughout the entire ETJ (notably in the SE quadrant and the proposed NW Loop and Craddock Extension) encourage agricultural and natural land conversion to low-density sprawl. This proliferation of ETJ roads is antithetical to the concept of "compact and connected growth," and showing these roads with equal emphasis as roads within the existing City Limits on the plan conflicts with the goals of the Preferred Scenario Map embedded within the Comprehensive Plan.

- **Recommend removing the excessive ring roads from the Thoroughfare Plan and placing emphasis instead on growth and improvements that reinforce the Preferred Scenario Map.**
- Several important roads that run through the existing City are currently owned by TXDOT which creates conflicts in objectives - but no distinction is noted in the TMP plans for these roads nor timeframes for the City to take over their ownership. Further, some of these core roads are noted in Capital Improvement Projects as being prioritized for "capacity enhancements" which conflict with the goals of creating Complete Streets, as well as citizen desires.
- **Recommend distinguishing TXDOT-owned thoroughfares and outlining a plan for eventual City control; and eliminating capacity enhancement projects for roads that run through the existing city core and instead focus resources in these areas on Complete Street conversions and speed reductions for safety, liveability.**
- Additional cross-section comments:
  - **Recommend reducing proposed lane widths to 10' for 35 mph and less roadways to improve safety, as well as reduce impervious cover.**
  - **Recommend adding cross-sections to both the TMP and CodeSMTX that incorporate stormwater biofilters / retention in ROW versus typical crowned vegetated strips.**

### **Bike Plan**

- As noted in my previous comments, the plan lacks connected and dedicated bike lanes in large portions of the existing town. I am reemphasizing this point as these missing routes are critical for shorter, in-town commuter routes versus the plan's current focus on long-distance, regional routes and recreational shared-use trails / greenways. Studies show that dedicated bike lanes are critical to increasing bike ridership ([such as this report](#)) and particularly for women ([as shown in this report](#)).
- **Recommend adding dedicated and connected bike lane routes through existing neighborhoods throughout town, such as along Bishop, Craddock, RR12, Holland, Hopkins, Hunter, MLK, LBJ, Stagecoach, River Road, Thorpe, Mill, etc.**
- The plan shows an over-dependence on sharrows instead of protected and/or buffered bike lanes. Sharrows do not increase safety or ridership ([as noted in this report](#)) and a review of speed/volume relationship to bike facilities per TMP presentation materials indicates a need for bike lanes on roadways with speeds of 18.5 to 35 mph.
- **Recommend utilizing protected bike lanes or at least buffered bike lanes on connected, dedicated bike routes to increase biker safety, awareness and ridership.**

### **Trails / Greenways Plan**

- Inconsistent nomenclature between "trails" and "greenways" is confusing.
- **Recommend making terms consistent for clarity.**
- Plan does not currently show zones of proposed natural lands to be acquired along future trail network.
- **Recommend adding a layer for proposed natural land acquisition / easements that create a robust buffer along the proposed trail network and clearly outline dedication strategies.**

The draft plans already appear to be a big improvement upon the 2004 plan - thank you all for your work on its development. It is my hope that all of the provided comments further help to better align the plan with overall goals for making San Marcos more multi-modal and its streets safer, while also directing growth and investments in a more compact and connected fashion. Please let me know if there are any questions about these items - I would be happy to provide more detail if necessary.

Best,

Sarah Simpson, RA, LEED GA  
Principal Architect | Colorspace Architecture & Urban Design  
407 S. Stagecoach Trail, Ste 203, San Marcos, TX 78666 | 512.395.5038  
[www.color-space.com](http://www.color-space.com) | @color.space

On Fri, Oct 27, 2017 at 10:41 AM, Sarah Simpson <[ssimpson@color-space.com](mailto:ssimpson@color-space.com)> wrote:

To the San Marcos Engineering and Capital Improvements Department:

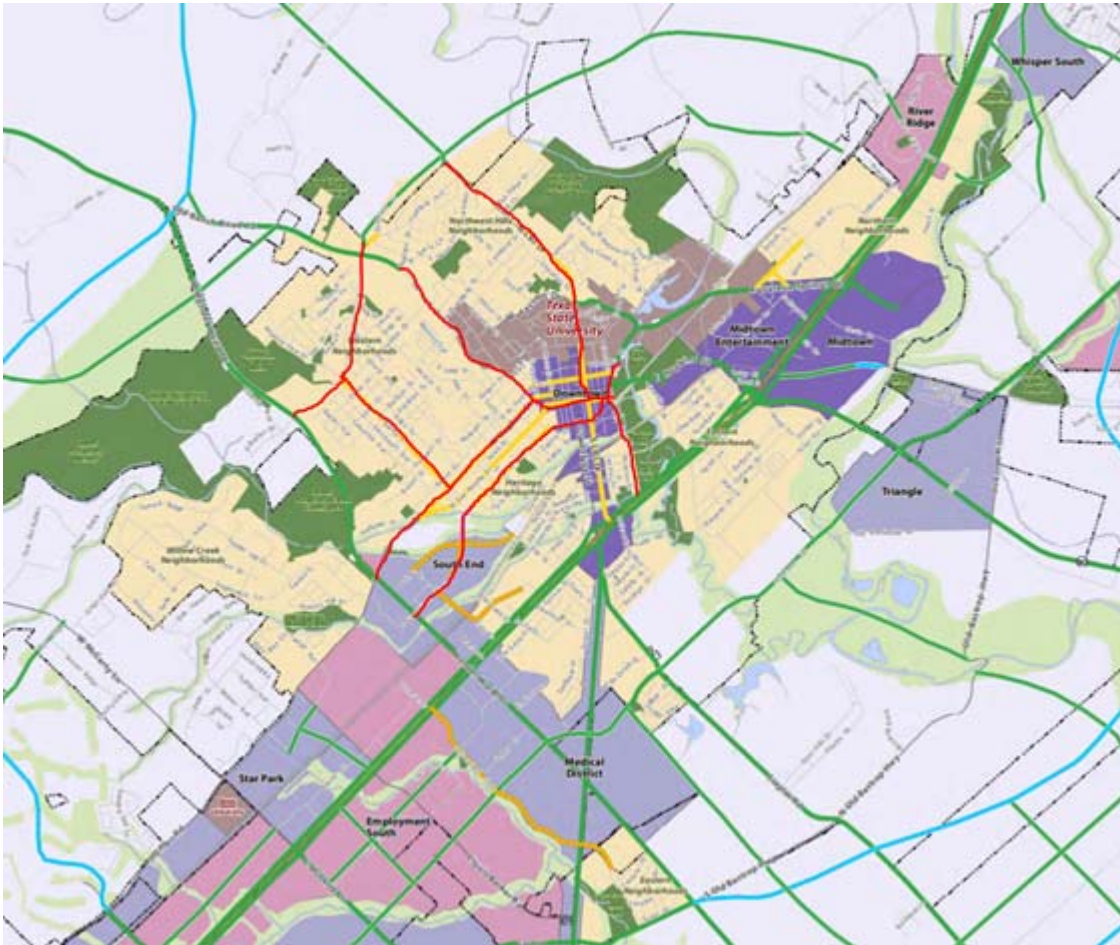
I would like to provide the following four comments regarding the San Marcos Transportation Master Plan. The first two are in regards to the overall plan, while the latter focus on the South End area of the TMP.

**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.





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: <https://nacto.org/publication/urban-street-design-guide/street-design-elements/lane-width/>

# Transportation Master Plan Cross-Sections

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	2	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	4'	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

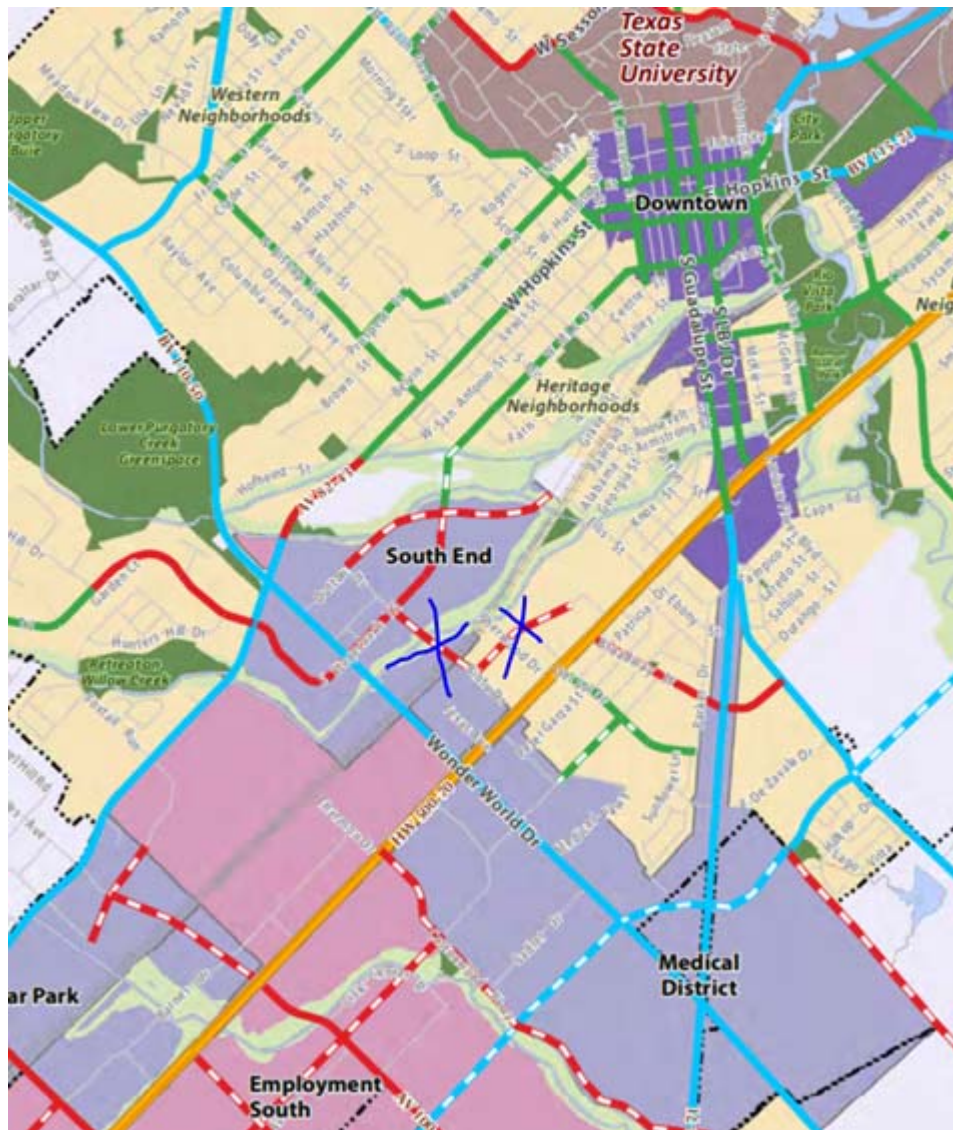
## South End Specific Commentary

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.

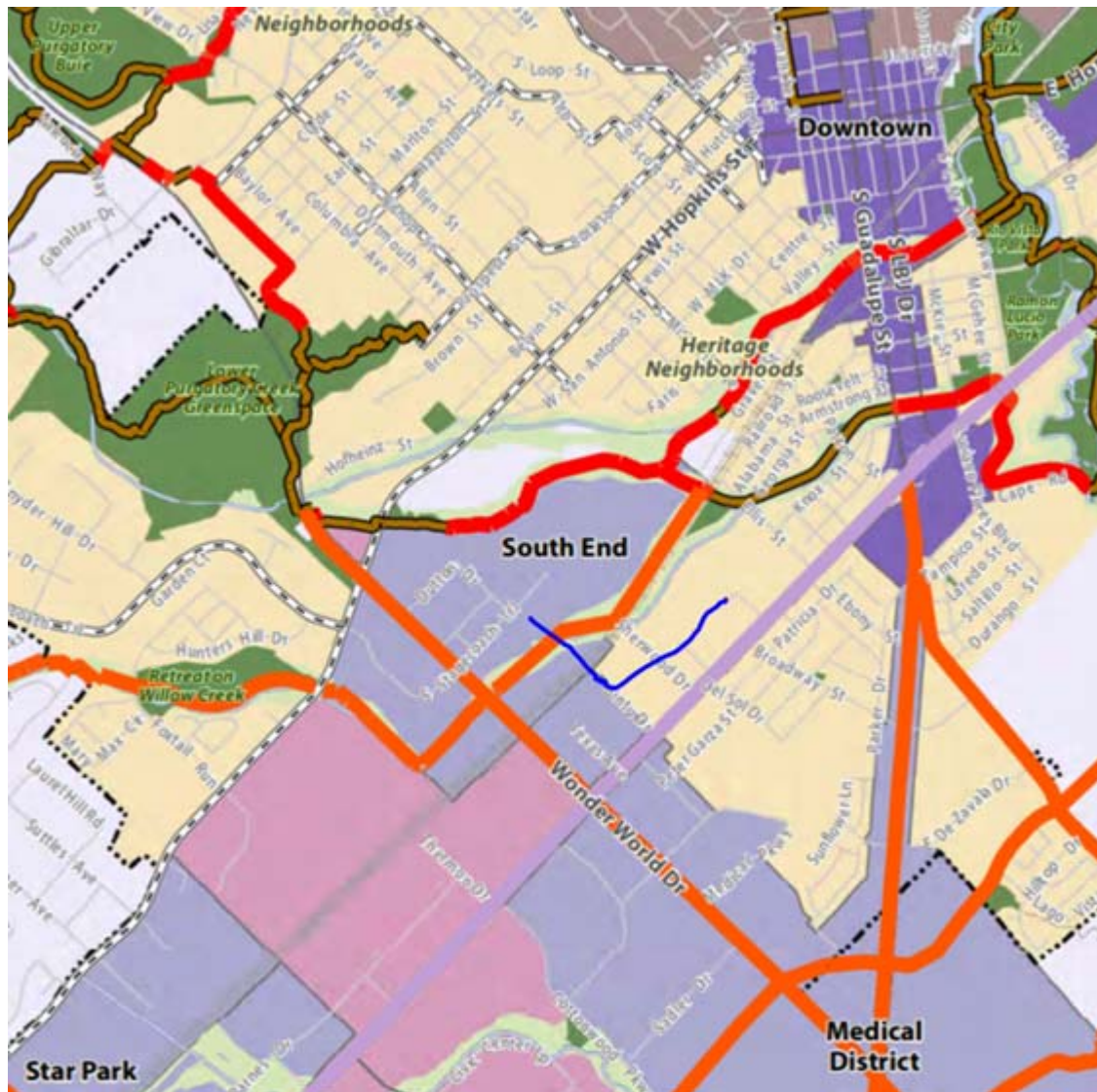




4. Similar to the comment above, I do not recommend placing an avenue extension across the rail road tracks between Dutton Drive, Bintu Road and Kingwood Street. This would require significant infrastructure investment since it would require traversing both Willow Springs Creek, as well as a railroad 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.







Thank you and best,

**Sarah Simpson, RA, LEED GA**

Principal Architect | Colorspace

407 Stagecoach Trail, Ste 203

San Marcos, TX 78666

[512.395.5038](tel:512.395.5038)

[ssimpson@color-space.com](mailto:ssimpson@color-space.com) | @color.space

**CAUTION:** This is an email from an EXTERNAL source. DO NOT click links or open attachments without positive sender verification of purpose. Never enter USERNAME, PASSWORD or sensitive information on linked pages from this email.