Statewide TxDOT Bicycle Advisory Committee Update

January 20, 2017 Meeting

Karla Weaver, AICP
Building Resilient Cities, One Trail at a Time

Bicycle and Pedestrian Advisory Committee
February 15, 2017
Where could you walk in ten minutes?
The Trust for Public Land—land for people
Since 1979, The Trust for Public Land has protected nearly 40,000 acres of Texas’s most important natural places, including over 1,800 acres right here in North Texas.
Trust for Public Land Projects in North Texas

Joppa Preserve, Dallas | 256 Acres
Trust for Public Land Projects in North Texas

Southwest Nature Preserve, Arlington | 58 Acres
Trust for Public Land Projects in North Texas

Eagle Mountain Park, Fort Worth | 396 Acres
Trust for Public Land Projects in North Texas

Chalk Hill Trail, Dallas | 33 Acres
WITH A GROWING POPULATION AND BOOMING ECONOMY, NORTH TEXAS STANDS ON THE CUSP OF A NEW ERA IN ITS HISTORY.
Through optimism and collaboration, our city is busy re-creating our public spaces in the most extraordinary ways imaginable.
BUT CHALLENGES STILL REMAIN…
Portion of Loop 12 to be closed for a week after floods

Flooding in Dallas. Friday, May 29, 2015. (Photo: WFAA)
In DFW, Struggle to Save Water and Prepare for Growth
BUT CHALLENGES STILL REMAIN…

The Dallas Morning News

Texas workers’ health insurance costs near highest in nation
Dallas officials to get update on bike lanes, ‘complete streets’ efforts

Lowest Greenville was the site of one of the most notable “complete streets” redos. The number of lanes has dropped, parking has been added, sidewalks widened and crosswalks enhanced.
North Texas’s green assets offer cost-effective and unique strategies for addressing the city’s biggest economic social and environmental challenges of today.
A living work of art
A living work of art
East to west
Santa Fe Trail
Santa Fe Trail
Multi-benefit parks strengthen cities

- Retain stormwater runoff
- Cool neighborhoods in the summertime heat
- Provide buffer against flooding
- Safe routes to school and work
- Increase active recreation of nearby residents
- Grow the local economy through rejuvenating forgotten or overlooked areas of the city
- Diversify mobility options through walking and cycling paths
- Clean pollution from the air
- Create a sense of place and community for nearby neighbors
Environmental Challenges
Social Challenges

Environmental Challenges
Social Challenges

Environmental Challenges

Economic Challenges
"Urban Resilience is the capacity of individuals, communities, institutions, businesses, and systems within a city to survive, adapt, and grow no matter what kinds of chronic stresses and acute shocks they experience."

– 100 Resilient Cities
BUILDING RESILIENT CITIES WITH BETTER, SMARTER PARKS
Using GIS to find the best places for parks

GIS can tell us things like:

- Who owns land parcels
- Percentage canopy cover
- Poverty rate in an area
- Prevalence of asthma
- Soil type
- Flood zone
- Demographic data
- …and more
Climate-Smart Cities™ program: objectives

This program uses four strategies to help cities improve their climate resiliency:

Through data, analysis, and mapping, we are helping cities identify key opportunities for using parks to improve their resilience to the challenges posed by a changing climate.
Climate-Smart Cities™ program

Climate-Smart Cities Partnerships
Introducing:

Smart Growth for Dallas

Using parks to connect communities, improve public health, and protect Dallas’s most important natural places
 Activate
Connect
Educate
Equity
Health
Absorb
Cool
Protect

Our “Triple Bottom Line” Strategy

Parks about more than beauty and recreation. We’re using a “triple bottom line” strategy that evaluates potential parks sites in Dallas based on eleven different economic, social, and ecological objectives

- Social Objectives
  - Health Value
  - Recreation Value
  - Property Value

- Ecological Objectives

- Economic Objectives
Phase I Ecological Objectives

• ABSORB & PROTECT
  Parks and open space can absorb stormwater and serve as a buffer between rivers and surrounding development, providing flood protection. Our analysis identifies locations where green asset investments, such as expanded tree canopy or strategic park design and location can absorb stormwater and protect development from flooding.

• COOL
  Well-positioned green space and canopy cover can reduce ambient temperature by 5° to 10° F. Our analysis identifies areas of Dallas where parks and open space can reduce urban heat islands and cool nearby neighborhoods.
Phase I Social Objectives

• CONNECT
Many Dallas residents rely on biking paths, greenbelts, and linear parks for their daily transportation needs. Our analysis identifies areas where investments in cycling/pedestrian infrastructure can improve safety and improve connectivity between trails and transit.

• HEALTH
By creating opportunities for active recreation, parks and open spaces are able to improve the health of nearby residents. Our analysis identifies areas of Dallas where parks can help combat diabetes, heart disease, and asthma.
Phase I Social Objectives (continued)

- **EQUITY**
  Parks are particularly important to neighborhoods with a high prevalence of low-income households, children, senior citizens, and residents with limited English-proficiency. For these groups, parks fill the need for common public space that may not be readily available in their neighborhoods. Our analysis identifies areas of Dallas where parks can provide common public space for these groups.
Data-informed and strategic decisions
Objective: Parks and Trails to Connect Communities

Layer 1: Identify areas of Dallas without access to trails and bicycle infrastructure
Objective: Parks and Trails to Connect Communities

Layer 2: Identify areas of Dallas within walking distance to DART light rail stations
Layer 3: Identify areas of Dallas with high prevalence of collisions between pedestrians and vehicles.

Objective: Parks and Trails to Connect Communities
Objective: Parks and Trails to Connect Communities

Connecting and expanding walk-bike corridors reduces transportation-related emissions by allowing urban residents to make trips by foot or bicycle that they would otherwise make by car. This has a direct, positive impact on greenhouse gas (GHG) emissions, as trip emissions are reduced by 100 percent. Research has demonstrated that increasing a neighborhood’s "walkability" by just 5% is correlated with driving 6.5% fewer miles per capita.

This map highlights areas that are particularly in need of new active transportation connections.

This map was created using a weighted overlay analysis based on the following criteria:

- Bikeway and trail gaps
- Safety concerns - bike/ped accidents
- Create connections to transit

Connect Priorities
- High
- Moderate to high
- Moderate

Study Area
Priority lands already under protection
Parks and open space
- Existing trail
- Proposed/programmed trail
- County boundary
- Community boundary
MAPPING PARK BENEFITS

Absorb & Protect // Cool
Connect // Equity // Health
### Absorb & Protect

Provide cost-effective stormwater absorption through parks, open space, and green infrastructure in areas prone to increased flooding. Improve flood protection and reduce flash flood risks through creation of greenways along waterbodies.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimated runoff potential</td>
<td>Areas with potential for high amounts of runoff &amp; flooding during storms. Calculated using soil type and land use information.</td>
</tr>
<tr>
<td>Wetlands, waterbodies, streams buffer</td>
<td>Wetlands, waterbodies and streams buffered by 100 feet to create high priority areas.</td>
</tr>
<tr>
<td>Floodways and flood zones</td>
<td>FEMA's floodzone areas were translated directly into priority areas</td>
</tr>
<tr>
<td>Escarpment areas in southern Dallas</td>
<td>Escarpment areas in southern Dallas, mapped by the city, were buffered by 200 feet.</td>
</tr>
</tbody>
</table>
As evidenced by the record-breaking spring rains of 2015, which came on the heels of the record-breaking drought of 2010-2013, North Texas precipitation is characterized by multi-year periods of drought and deluge. Additionally, with population growth and increase of impervious surface, the risk of flooding poses a serious threat to many neighborhoods in Dallas. Green asset investments, such as expanded greenway buffers along waterways or strategic park design and location can provide very cost-effective stormwater absorption, while also meeting other needs like urban heat island reduction or green space in underserved areas.

This map highlights areas that may be at risk due flooding from storm events due to the natural and physical characteristics across the city.

This map was created using a weighted overlay analysis based on the following criteria:

- Estimated runoff potential
- Wetlands, waterbodies, streams buffer
- Floodways and flood zones
- Escarpment areas in southern Dallas

Absorb & Protect

CLIMATE-SMART CITIES: SMART GROWTH FOR DALLAS


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Reduce heat island impacts through strategic investment in green assets.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tree canopy cover</td>
<td>Areas with low tree canopy cover</td>
</tr>
<tr>
<td>Impervious cover</td>
<td>Areas with high percentage of impervious cover</td>
</tr>
</tbody>
</table>
Dallas is no stranger to heat, with summer temperatures regularly soaring above 100°F. Well positioned green space and canopy cover can reduce ambient temperature by 3° to 10°F.

Elevated temperatures affect communities by increasing summer peak energy demand, air conditioning costs, air pollution, and greenhouse gas emissions. This can necessitate an extra 5 – 10% of energy use for cooling urban buildings during peak energy use periods. This has important climate change impacts, as extra energy use for cooling results in additional greenhouse gas emissions, a vicious cycle that will further increase global air temperatures and urban heat challenges.

This map was created using a weighted overlay analysis based on the following criteria:
- Tree canopy cover
- Impervious cover

Cool
CLIMATE-SMART CITIES: SMART GROWTH FOR DALLAS
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Enhance active transit connectivity through analysis of existing and planned bike infrastructure

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bikeway and trail gaps</td>
<td>Areas that lack access to trail and bike infrastructure based on existing and approved (funded) planned trails</td>
</tr>
<tr>
<td>Safety concerns – bike/ped accidents</td>
<td>Areas where there are safety concerns for bicyclists and pedestrians based on the density of vehicle-pedestrian and vehicle-bicycle crashes</td>
</tr>
<tr>
<td>Create connections to transit</td>
<td>Areas where green infrastructure can help connect people to public transit (Light rail and streetcar, where light rail was weighted higher)</td>
</tr>
</tbody>
</table>
Connecting and expanding walk-bike corridors reduces transportation-related emissions by allowing urban residents to make trips by foot or bicycle that they would otherwise make by car. This has a direct, positive impact on greenhouse gas (GHG) emissions, as trip emissions are reduced by 100 percent. Research has demonstrated that increasing a neighborhood’s “walkability” by just 5% is correlated with driving 6.5% fewer miles per capita.

This map highlights areas that are particularly in need of new active transportation connections.

This map was created using a weighted overlay analysis based on the following criteria:

- Bikeway and trail gaps
- Safety concerns - biker/ped accidents
- Create connections to transit

**Connect Priorities**
- High
- Moderate to high
- Moderate
- Study Area
- Priority lands already under protection
- Parks and open space
- Existing trail
- Proposed/programmed trail
- County boundary
- Community boundary
Reduce barriers between social groups, improve park access for vulnerable and underserved populations, and make Dallas’s parks and open space more equitable.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low income households</td>
<td>% of households within a block group with an annual income less that $25k</td>
</tr>
<tr>
<td>Seniors over 64</td>
<td>% of population within a block group over 64 years of age</td>
</tr>
<tr>
<td>Children under 5</td>
<td>% of population within a block group younger than 5 years of age</td>
</tr>
<tr>
<td>Less than a High School Education</td>
<td>% of population within a block group with less than a high school education</td>
</tr>
<tr>
<td>English as a Second Language</td>
<td>% of households within a block group where no one age 14 and over speaks English &quot;very well&quot; or speaks English only</td>
</tr>
</tbody>
</table>

*From EPA's Environmental Justice Screen, a nationally consistent dataset that combines environmental and demographic indicators in maps and reports.*
Delivering multi-benefit green infrastructure can help address longstanding inequalities of opportunity and risk in low-income areas. For example, carbon mitigation in cities requires reducing energy use, such as lessening reliance on motorized transportation and lowering home energy use required for cooling. The economic co-benefits of facilitating these changes will have particularly meaningful benefits in low-income neighborhoods where energy costs have a disproportionate impact on household budgets.

Further, the inequitable distribution of green infrastructure amenities within cities also exacerbates the climate vulnerability of low-income populations to threats such as extreme heat and flooding. For example, the strong correlation between urban tree cover and income level within cities means that low-income neighborhoods where residents are less likely to have air conditioning and more likely to face heat-related health risks also have the most intense urban heat islands.

This map was created using a weighted overlay analysis based on the following criteria:

- Low income households
- Seniors over 65
- Children under 5
- Less than a High School Education
- English as a Second Language

Equity
CLIMATE-SMART CITIES: SMART GROWTH FOR DALLAS
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Health

Increase access to active recreation in areas with high incidence of key public health challenges.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asthma and respiratory disease</td>
<td>% of people within a zip code affected by asthma, emphysema, chronic bronchitis or sinusitus</td>
</tr>
<tr>
<td>Diabetes</td>
<td>% of people within a zip code affected by diabetes</td>
</tr>
<tr>
<td>Cardiovascular Disease</td>
<td>% of people within a zip code affected by angina, heart failure, coronary heart disease, heart attack, hypertension, or stroke</td>
</tr>
</tbody>
</table>
Healthy and equitable cities have diverse greenspace available to all city residents, regardless of location or income. Parks and open space can support active and healthy lifestyles for all residents, and provided added health benefits to populations that may be at greater risk due to health factors such as asthma or diabetes.

This map highlights areas that could benefit from new parks and open space to promote a healthy and active lifestyle.

This map was created using a weighted overlay analysis based on the following criteria:

- Asthma and respiratory disease
- Diabetes
- Cardiovascular Disease

**Health**

CLIMATE-SMART CITIES: SMART GROWTH FOR DALLAS

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Overall Priorities

CLIMATE-SMART CITIES: SMART GROWTH FOR DALLAS

This map identifies high priority areas for strategic green infrastructure park investment that would help address stormwater challenges, connect and expand walk-and-bike corridors, and mitigate elevated urban temperatures, all with a focus on the people most at risk to these impacts.

This map was created using a weighted overlay analysis based on the following goals:

- Equity
- Health
- Connect
- Cool
- Absorb & Protect

Legend:
- Overall Priorities
  - High
  - Moderate to high
  - Moderate
  - Study Area
  - Priority lands already under protection
  - Parks and open space
  - County boundary
  - Community boundary
WHAT CAN WE DO WITH ALL THIS DATA?
## Parcel Table

<table>
<thead>
<tr>
<th>General Info</th>
<th>Filtering Criteria</th>
<th>Priority Results</th>
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</tr>
<tr>
<td>106</td>
<td>34</td>
<td>000000100100136</td>
</tr>
</tbody>
</table>
Data-informed and strategic decisions
Find opportunities for joint-use trails
Identify potential linear parks and trails
Connect trails to transit and other destinations
WHAT’S NEXT?
Community Engagement
# Community Engagement

<table>
<thead>
<tr>
<th>Date</th>
<th>Meeting</th>
<th>Attendance</th>
</tr>
</thead>
<tbody>
<tr>
<td>11/10/2016</td>
<td>Kickoff</td>
<td>56</td>
</tr>
<tr>
<td>11/17/2016</td>
<td>Lake Highlands Baptist Church</td>
<td>16</td>
</tr>
<tr>
<td>11/28/2016</td>
<td>Campbell Green Rec Center</td>
<td>25</td>
</tr>
<tr>
<td>12/06/2016</td>
<td>Hampton Illinois Branch Library</td>
<td>19</td>
</tr>
<tr>
<td>12/15/2016</td>
<td>Bachman Lake Rec Center</td>
<td>6</td>
</tr>
<tr>
<td>01/05/2017</td>
<td>Pleasant Grove Branch Library</td>
<td>11</td>
</tr>
<tr>
<td>01/12/2017</td>
<td>Highland Hills Branch Library</td>
<td>8</td>
</tr>
<tr>
<td>01/19/2017</td>
<td>Center for Non-Profit Mgmt</td>
<td>22</td>
</tr>
<tr>
<td><strong>TOTALS:</strong></td>
<td></td>
<td><strong>157</strong></td>
</tr>
</tbody>
</table>
Smart Growth for Dallas – Phase 2

April 2017 – September 2018

• Additional data analysis
• Further community engagement (20 small meetings)
• Build-out of “Decision Support Tool”
• Creation of interactive public-facing website
• Tree planting demonstration project
“Hyper-Connectivity” Modeling
### “Hyper-Connectivity” Modeling

<table>
<thead>
<tr>
<th>Cross Kirkland Corridor</th>
<th>0.38% Mode Shift</th>
<th>2.07% Mode Shift</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Days¹</td>
<td>215</td>
<td>215 days of use/year</td>
<td></td>
</tr>
<tr>
<td>Average length of bicycle trips²</td>
<td>2.5</td>
<td>2.5 miles</td>
<td></td>
</tr>
<tr>
<td>Annual average daily traffic³</td>
<td>4044</td>
<td>4044 trips per day</td>
<td></td>
</tr>
<tr>
<td>Mode shift from driving to biking</td>
<td>0.0038</td>
<td>0.0207</td>
<td></td>
</tr>
<tr>
<td>Credit for activity centers near the project⁴</td>
<td>0.002</td>
<td>0.002</td>
<td></td>
</tr>
<tr>
<td>Annual Auto Trips Reduced</td>
<td>5042.45</td>
<td>19735.12 trips/year</td>
<td></td>
</tr>
<tr>
<td>Annual Auto VMT Reduced</td>
<td>12606.13</td>
<td>49337.79 miles/year</td>
<td></td>
</tr>
<tr>
<td>Annual Emission Reductions</td>
<td>11476.95</td>
<td>44918.43 lbs CO₂/year</td>
<td></td>
</tr>
<tr>
<td>CO₂ saving per VMT reduced</td>
<td>0.91</td>
<td>0.91 lbs CO₂/mile</td>
<td></td>
</tr>
</tbody>
</table>
Achieving 100% ten-minute walk in Dallas

- **PLAN**
  - Smart Growth for Dallas

- **FUND**
  - Dallas Bond 2017

- **PROTECT**
  - Land acquisition program

- **CREATE**
  - Specific park projects
Overall Priorities & Illustrative Opportunities

CLIMATE-SMART CITIES: SMART GROWTH FOR DALLAS

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Thank you!

Robert Kent | North Texas Area Director
robert.kent@tpl.org | 469-615-5448
2016
BICYCLE AND PEDESTRIAN
TRAFFIC COUNT REPORT

Daniel Snyder
Technology – Permanent Equipment

- Equipment Can be For Trails or On-Street

Infrared and Inductive Loop Combination
Data Collection

- 15-minute Count Intervals
- 24 hrs day/7 days Week
- Alert System if Count Disruptions Occur
- Automated Daily Data Transmission to the Cloud
- Web-based Software to Manage Data
2016 Data Overview
2016 Average Mode Share Split of Count Stations in the North Central Texas Region

- Bicyclists: 42%
- Pedestrians: 58%
Mode Share Split by Count Station (2016)

- Pedestrians
- Bicyclists

<table>
<thead>
<tr>
<th>Station</th>
<th>Bicyclists</th>
<th>Pedestrians</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dallas: White Rock Creek Trail - Mockingbird Ln.</td>
<td>17%</td>
<td>83%</td>
</tr>
<tr>
<td>Fort Worth: Trinity Trails - Cowtown Wakepark</td>
<td>25%</td>
<td>75%</td>
</tr>
<tr>
<td>Denton: Denton Branch Rail Trail - Morse St.</td>
<td>31%</td>
<td>69%</td>
</tr>
<tr>
<td>Dallas: Santa Fe Trail - Hill Ave.</td>
<td>32%</td>
<td>68%</td>
</tr>
<tr>
<td>Dallas: White Rock Creek Trail - Cottonwood Trail Crossing</td>
<td>33%</td>
<td>67%</td>
</tr>
<tr>
<td>North Richland Hills: Cotton Belt Trail - Holiday Ln.</td>
<td>36%</td>
<td>64%</td>
</tr>
<tr>
<td>Dallas: Santa Fe Trail - Glasgow Dr.</td>
<td>40%</td>
<td>60%</td>
</tr>
<tr>
<td>Dallas: White Rock Creek Trail - Park Central Dr.</td>
<td>41%</td>
<td>59%</td>
</tr>
<tr>
<td>Plano: Chisholm Trail - Orlando Dr.</td>
<td>42%</td>
<td>58%</td>
</tr>
<tr>
<td>Dallas: Santa Fe Trail - Beacon St.</td>
<td>44%</td>
<td>56%</td>
</tr>
<tr>
<td>Denton: Denton Branch Rail Trail - Medpark Station</td>
<td>44%</td>
<td>56%</td>
</tr>
<tr>
<td>Fort Worth: Trinity Trails - Kelly Field</td>
<td>47%</td>
<td>53%</td>
</tr>
<tr>
<td>Plano: Bluebonnet Trail - US 75</td>
<td>48%</td>
<td>52%</td>
</tr>
<tr>
<td>Plano: Chisholm Trail - Jack Carter Park</td>
<td>48%</td>
<td>52%</td>
</tr>
<tr>
<td>Fort Worth: Trinity Trails - Clearfork Food Park</td>
<td>48%</td>
<td>52%</td>
</tr>
<tr>
<td>Dallas: Cottonwood Trail - Hamilton Park</td>
<td>48%</td>
<td>52%</td>
</tr>
<tr>
<td>Dallas: Santa Fe Trail - W insted Dr.</td>
<td>52%</td>
<td>48%</td>
</tr>
<tr>
<td>Plano: Oak Point Park &amp; Nature Preserve Trail</td>
<td>52%</td>
<td>48%</td>
</tr>
<tr>
<td>Fort Worth: Trinity Trails - Henderson Bridge</td>
<td>55%</td>
<td>45%</td>
</tr>
<tr>
<td>Dallas: White Rock Lake Trail - Wendy Ln.</td>
<td>64%</td>
<td>36%</td>
</tr>
<tr>
<td>Plano: Russell Creek</td>
<td>66%</td>
<td>34%</td>
</tr>
<tr>
<td>Dallas: White Rock Lake Trail - Fisher Rd.</td>
<td>66%</td>
<td>34%</td>
</tr>
<tr>
<td>Plano: Legacy Trail</td>
<td>68%</td>
<td>32%</td>
</tr>
<tr>
<td>Dallas: Katy Trail - Lyte St.</td>
<td>78%</td>
<td>22%</td>
</tr>
<tr>
<td>Plano: Rowlett Trail</td>
<td>80%</td>
<td>20%</td>
</tr>
<tr>
<td>Dallas: Katy Trail - Harvard Ave.</td>
<td>81%</td>
<td>19%</td>
</tr>
<tr>
<td>Dallas: Katy Trail - Fitzhugh Ave.</td>
<td>81%</td>
<td>19%</td>
</tr>
<tr>
<td>Dallas: Katy Trail - Routh St.</td>
<td>84%</td>
<td>16%</td>
</tr>
<tr>
<td>Allen: Watters Trail - Boon Elem. School</td>
<td>86%</td>
<td>14%</td>
</tr>
<tr>
<td>Allen: Cottonwood Trail - Exchange Parkway</td>
<td>88%</td>
<td>12%</td>
</tr>
</tbody>
</table>
Seasonal Pedestrian Activity

Katy Trail - Fitzhugh Avenue

- Pedestrians
- Bicyclists

<table>
<thead>
<tr>
<th>Month</th>
<th>Pedestrians</th>
<th>Bicyclists</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>70,000</td>
<td>10,000</td>
</tr>
<tr>
<td>February</td>
<td>75,000</td>
<td>15,000</td>
</tr>
<tr>
<td>March</td>
<td>80,000</td>
<td>20,000</td>
</tr>
<tr>
<td>April</td>
<td>85,000</td>
<td>25,000</td>
</tr>
<tr>
<td>May</td>
<td>90,000</td>
<td>30,000</td>
</tr>
<tr>
<td>June</td>
<td>85,000</td>
<td>25,000</td>
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<tr>
<td>July</td>
<td>80,000</td>
<td>20,000</td>
</tr>
<tr>
<td>August</td>
<td>75,000</td>
<td>15,000</td>
</tr>
<tr>
<td>September</td>
<td>70,000</td>
<td>10,000</td>
</tr>
<tr>
<td>October</td>
<td>65,000</td>
<td>5,000</td>
</tr>
<tr>
<td>November</td>
<td>60,000</td>
<td>0</td>
</tr>
<tr>
<td>December</td>
<td>55,000</td>
<td>0</td>
</tr>
</tbody>
</table>
Seasonal Bicycle Activity

Santa Fe Trail - Hill Avenue

Bicycle and Pedestrian Trips

- Pedestrians
- Bicyclists
2016 Traffic Counts

- **7.4 million** bicycle and pedestrian traffic counts recorded in 2016 by 30 count locations!
Mobile Counter Loan Program
Technology – Mobile Equipment

Short Term Counts

Infrared Sensor with Direction Detection

Tubes

Tubes with Infrared Sensor Box Installed
Mobile Count Report

Cotton Belt Trail (E of Holiday Lane)
Period Analyzed: Sunday November 01, 2015 to Monday November 30, 2015

| Pedestrians | 966 | 33 | Saturday | 52 | 48 |
| Cyclists    | 1,457 | 48 | Sunday   | 51 | 49 |

12/01/2015
Permanen On-Street Bicycle Counts

Bellaire Drive
Total Monthly Traffic Volumes (2016)

Bicyclists

<table>
<thead>
<tr>
<th>Month</th>
<th>Bicycle and Pedestrian Traffic</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>3,000</td>
</tr>
<tr>
<td>February</td>
<td>4,000</td>
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<tr>
<td>March</td>
<td>5,000</td>
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<tr>
<td>April</td>
<td>6,000</td>
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<tr>
<td>May</td>
<td>6,000</td>
</tr>
<tr>
<td>June</td>
<td>7,000</td>
</tr>
<tr>
<td>July</td>
<td>7,000</td>
</tr>
<tr>
<td>August</td>
<td>8,000</td>
</tr>
<tr>
<td>September</td>
<td>6,000</td>
</tr>
<tr>
<td>October</td>
<td>5,000</td>
</tr>
<tr>
<td>November</td>
<td>4,000</td>
</tr>
<tr>
<td>December</td>
<td>3,000</td>
</tr>
</tbody>
</table>
QUESTIONS?

Karla Weaver
Program Manager
(817) 608-2376
kweaver@nctcog.org

Kevin Kokes
Principal Transportation Planner
(817) 695-9275
kkokes@nctcog.org

Daniel Snyder
Transportation Planner
(817) 608-2394
dsnyder@nctcog.org
Project Background

North Richland Hills, Texas

- Northeast Tarrant County
- Population: ≈70,000

Project Description

- Improve connectivity to local destinations
- Make connections to the regional trail network
- Improve safety and accessibility for all bicyclists
- Improve active transportation opportunities for residents
Existing Trail System
Opportunities

- Supportive Mayor and Council
- Extensive Off Road Trail System
Constraints
Limited open space for shared use paths
Constraints
IH820 is a barrier for cyclists
Constraints
Skepticism about numbers of on-road cyclists
Constraints
Existing conditions on unimproved state highway
Proposed Plan
Facility Types

- Bike Boulevards
- Buffered Bike Lanes
- Protected Bike Lanes
- Shared Use Paths
Intersection Treatments

- High Visibility Crossing
- High Visibility Crossing with Curb Adjustment
- High Visibility Crossing with Pedestrian Refuge Island
- Trail User Visibility Improvement
- Trail User Visibility Improvement with Refuge Island
- RRFB
Proposed Signage
Future Implementation
DART’s Bike to Work Day Activities

February 15, 2017

Chris Walters
NCTCOG’s TA Set-Aside
Call for Projects in the North Central Texas Region

Deadline for Project Nominations: February 24, 2017

Project Selection by RTC: June 2017
TxDOT’s TA Set-Aside Call for Projects in Areas Outside of Large Urbanized Areas

Deadline for Project Nominations: May 22, 2017

Project Selection by TTC: Fall 2017
May is National Bike Month

- Bike to School Day is Wednesday, May 10th
- Bike to Work Week is May 15th – 19th
- Bike to Work Day is Friday, May 19th
- Events are a fun opportunity to encourage others to try bicycle commuting!

Who’s Planning an Event?

http://www.nctcog.org/trans/sustdev/bikeped/bike2work.asp
This biennial conference is packed with state-of-the-practice information for planners, engineers, landscape architects, public health professionals, advocates, elected officials, and others working to advance active transportation and sustainable, healthy communities.

http://www.apbp.org/page/PDS2017
Comprehensive Bikeway Design Courses

July 31-August 8, 2017 (Advanced)
August 14–18, 2017 (Intro)
Portland, OR

These courses cover the fundamentals of bikeway design and planning through an intensive week of interactive classroom and field experience and one-on-one problem solving with instructors. The courses will highlight the latest research and innovative practice and provide you with skills and diverse perspectives to take your bike network to the next level.

https://www.pdx.edu/ibpi/professional_development
Any events or training opportunities to add?

Any suggestions/topics for future training opportunities that NCTCOG could coordinate?

Contact:

Kevin Kokes, AICP
kkokes@nctcog.org
(817) 695-9275

OR

Daniel Snyder
dsnyder@nctcog.org
(817) 608-2394
# Plans and Projects Underway

## Master Plans Underway
- Frisco Hike & Bike Master Plan Update
- Keller Parks and Trails Master Plan
- Flower Mound Parks & Trails Master Plan
- Grand Prairie Parks and Trails Master Plan Update
- Dallas County Mobility Plan
- Northlake Comprehensive Plan
- Wise County Thoroughfare Plan
- McKinney Parks and Trails Master Plan
- Sachse Comprehensive Plan Update
- Weatherford Thoroughfare Plan
- Weatherford Bicycle Master Plan
- Weatherford Complete Streets Policy

## Regional Projects
- Regional Trail Connection: Midlothian to Waxahachie
- Regional Trail Connections to Transit: Lewisville to Irving *(Lewisville, Carrollton, Coppell, Denton County, Dallas County, DCTA, NCTCOG, and DART)*

## Completed Plans
- North Richland Hills City Wide Trail and Route System Plan *(pending city council approval)*
- The Colony Trails & Bikeways Master Plan
Is the current BPAC meeting day and time suitable?

![Pie chart showing the results: Yes (majority) and No (minority)]
If the current BPAC meeting day of the week could be more convenient, please select which days are your first and second preference.

- First Preference
- Second Preference

![Bar chart showing preferences for meeting days]
- Monday: 1
- Tuesday: 3
- Wednesday: 5 (this day is suitable, but I prefer a different timeframe)
- Thursday: 1
- Friday: 2
If the current BPAC meeting time of day is not convenient, please select which timeframes are your first and second preference.
Comments or Questions?