#### **Memorandum**



DATE October 21, 2016

CITY OF DALLAS

Honorable Members of the Quality of Life & Environment Committee: Sandy Greyson (Chair), Tiffinni A. Young (Vice Chair), Rickey D. Callahan, Mark Clayton, Philip T. Kingston, B. Adam McGough

SUBJECT Smart Growth for Dallas

On Monday, October 24, 2016, you will be briefed on Smart Growth for Dallas. The briefing materials are attached for your review.

Please feel free to contact me if you have any questions or concerns.



Willis C. Winters, FAIA, Director Park and Recreation Department

A.C. Gonzalez, City Manager
c: Larry Casto, City Attorney
Craig D. Kinton, City Auditor
Rosa A. Rios, City Secretary
Daniel F. Solis, Administrative Judge
Ryan S. Evans, First Assistant City Manager
Eric D. Campbell, Assistant City Manager

Jill A. Jordan, P.E., Assistant City Manager Mark McDaniel, Assistant City Manager Joey Zapata, Assistant City Manager M. Elizabeth Reich, Chief Financial Officer Sana Syed, Public Information Officer Elsa Cantu, Assistant to the City Manager – Mayor & Council

# Smart Growth for Dallas

Data-driven decisions for the future of Dallas' parks, open spaces, and green infrastructure

Quality of Life Committee Briefing October 24, 2016







## Agenda

#### Program Overview

#### II. Presentation of Phase I Deliverables

- a) Citywide maps and analysis
- b) High-priority opportunities for creation of new parks, and redevelopment or expansion of current parks

#### III. Next Steps

- a) Expanded GIS Analysis
- b) Urban Heat Island Analysis
- c) Community Engagement



# I. PROGRAM OVERVIEW

### **About The Trust for Public Land**



The Trust for Public Land works across the country to create new parks and protect land for people, ensuring healthy, livable communities for generations to come.

Since our founding in 1972, we've created and protected more than 5,000 special places across the country. More than 7 million people live within a 10-minute walk of a place that we have created or protected. We have helped generate nearly \$60 billion in public funding for parks and natural areas through ballot measures supported by nearly 100 million voters in 37 states.

#### **About Our Partners**



The buildingcommunityWORKSHOP is a Texas based nonprofit community design center seeking to improve the livability and viability of communities through the practice of thoughtful design and making. We enrich the lives of citizens by bringing design thinking to areas of our city where resources are most scarce.



The Texas Trees Foundation preserves, beautifies, and expands parks and other public natural green spaces, public streets, boulevards, and rights-of-way by planting trees and encouraging others to do the same through educational programs that focus on the importance of building and protecting the "urban forest" today as a legacy for generations to come.

# WITH A GROWING POPULATION AND BOOMING ECONOMY, NORTH TEXAS STANDS ON THE CUSP OF A NEW ERAINITS HISTORY.



# BUT CHALLENGES STILL REMAIN...

# BUT CHALLENGES STILL REMAIN...

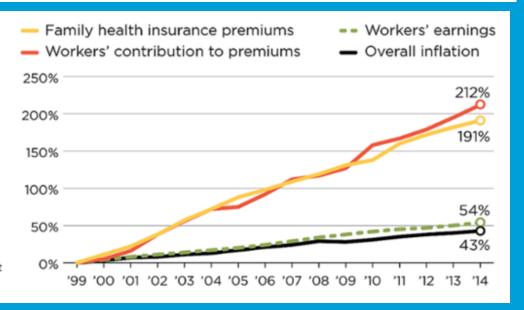
## The Pallas Morning News

# Texas workers' health insurance costs near highest in nation

#### Galloping U.S. health care costs

Cumulative increases in health insurance premiums, workers' contributions to premiums, inflation, and workers' earnings, 1999-2014

SOURCE: Kaiser/HRET Survey of Employer-Sponsored Health Benefits, 1999-2014; Bureau of Labor Statistics, Consumer Price Index, U.S. City Average of Annual Inflation (April to April), 1999-2014; Bureau of Labor Statistics, Seasonally Adjusted Data from the Current Employment Statistics Survey, 1999-2014 (April to April)



## The Pallas Morning News

# Dallas officials to get update on bike lanes, 'complete streets' efforts



2011 File Photo/David Woo

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.

# THE TEXAS TRIBUNE

In DFW, Struggle to Save Water and Prepare for Growth



# TexasMonthly

#### Boom With A View

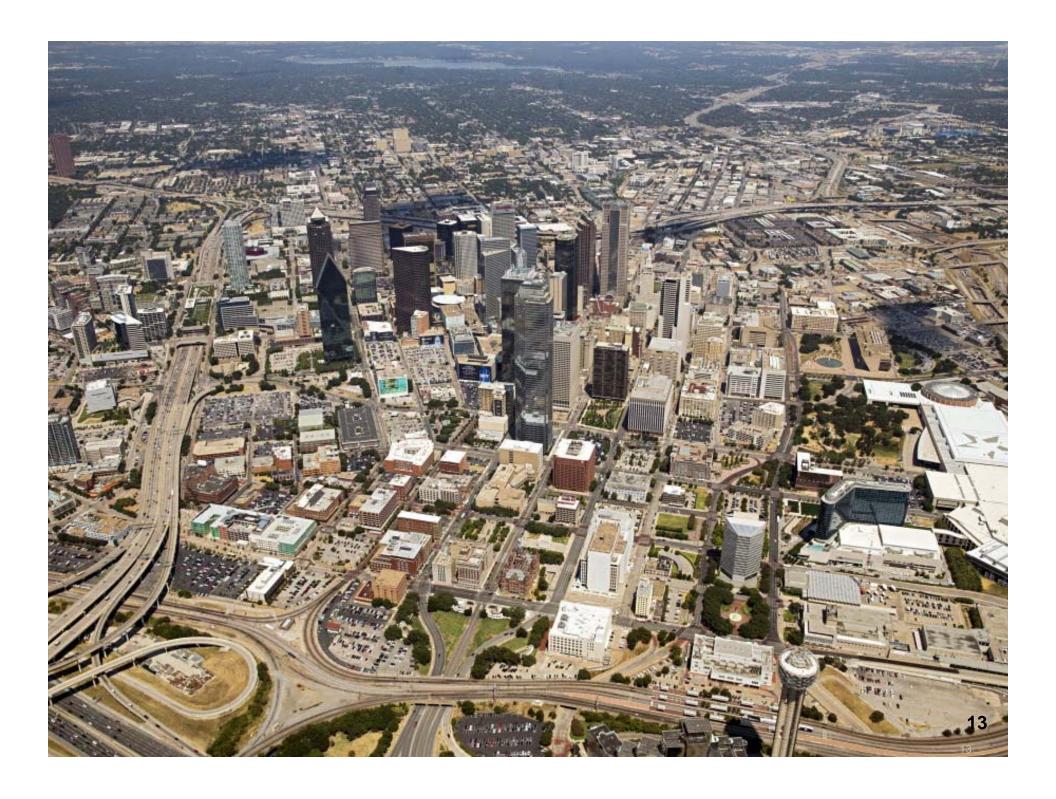
THE PERIL AND PROMISE OF BEING ONE OF THE FASTEST-GROWING CITIES IN TEXAS.

The Pallas Morning News

Poverty is eating at Dallas' core



\$1B 'Plan for Growth' in South Dallas







#### Climate-Smart Cities:

# Smart Growth for Dallas

Data-driven decisions for the future of Dallas' parks, open spaces, and green infrastructure

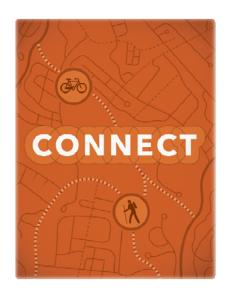




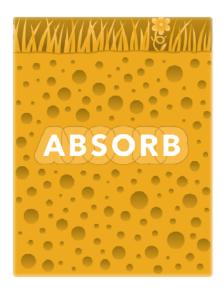


### Climate-Smart Cities<sup>TM</sup> program: objectives

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



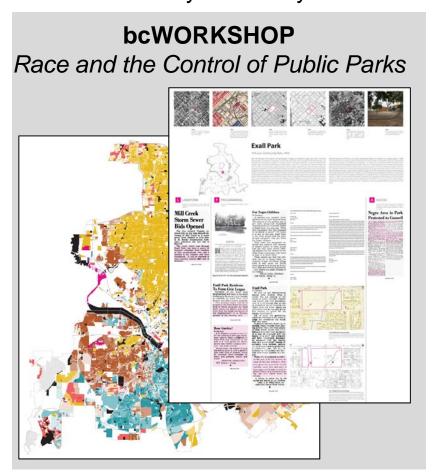
#### Climate-Smart Cities Partnerships

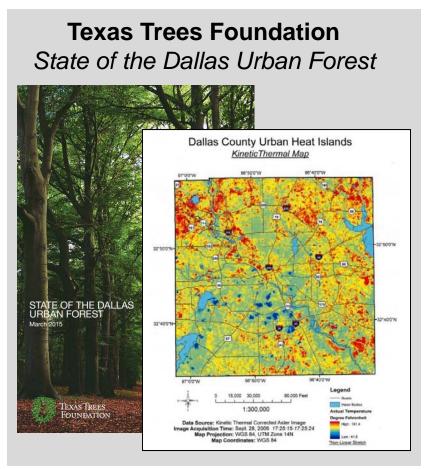




## Building on local success...

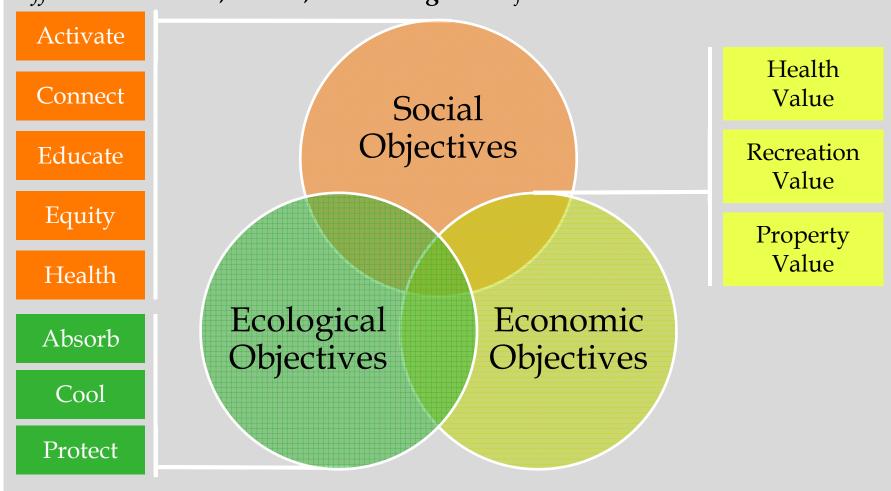
In collaboration with bcWORKSHOP, Texas Trees Foundation, and others, we developed *Smart Growth for Dallas* to be the "next step" that continues the work already underway in Dallas.

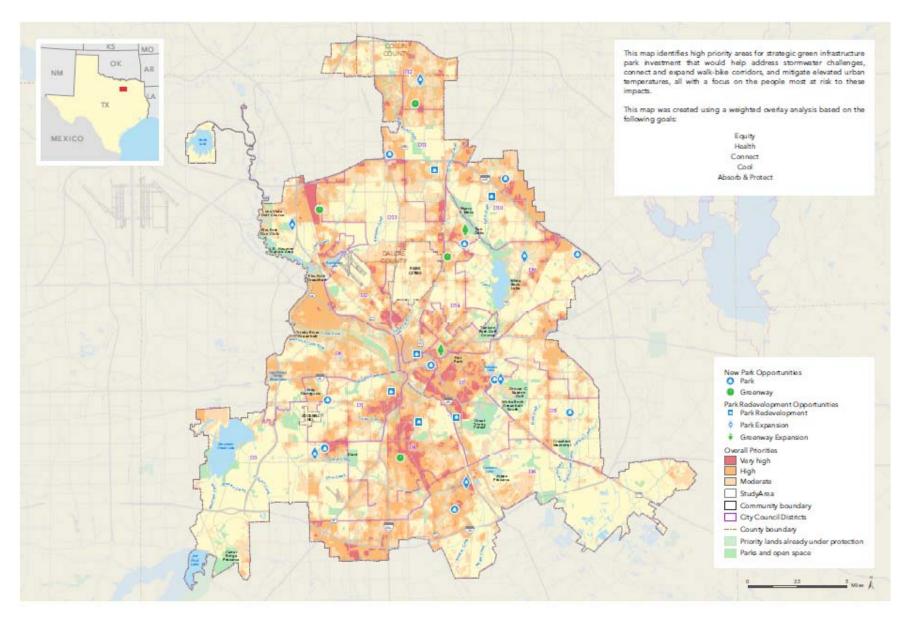




# Our "Triple Bottom Line" Strategy

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





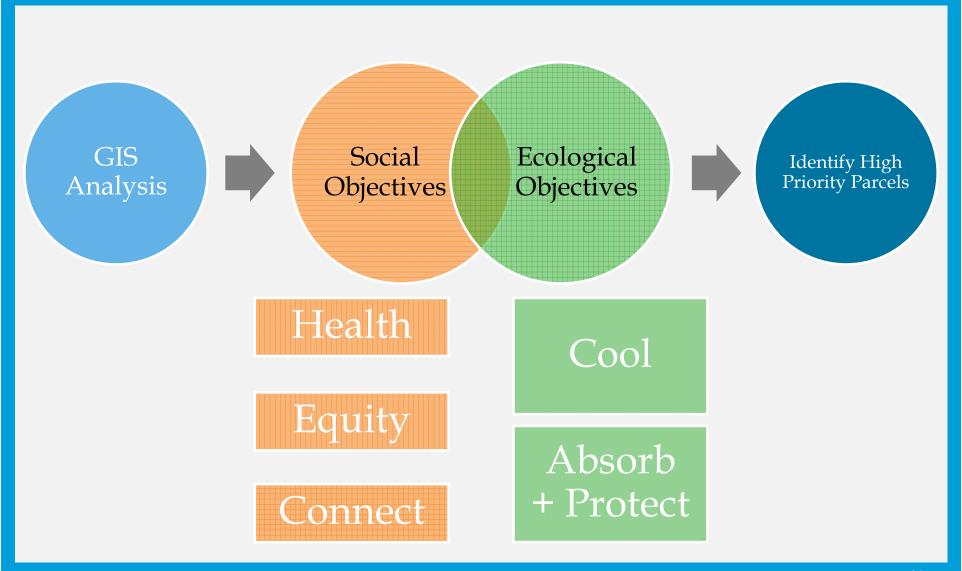
#### Overall Priorities & Illustrative Opportunities

CLIMATE-SMART CITIES: SMART GROWTH FOR DALLAS



# II. PHASE I DELIVERABLES Citywide Maps and Analysis

# SMART GROWTH FOR DALLAS PHASE I ANALYSIS



# 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.

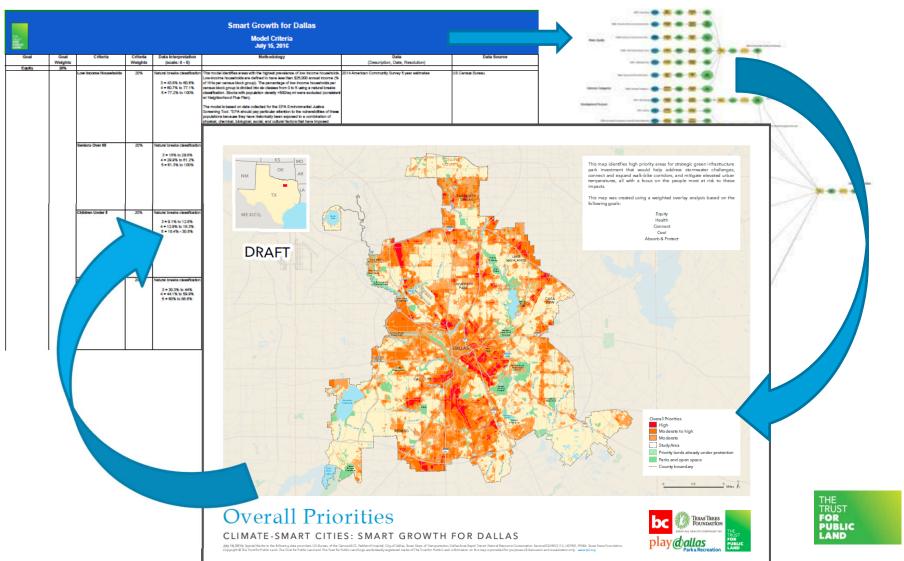
## Phase I Social Objectives (continued)

#### 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-driven and strategic decisions

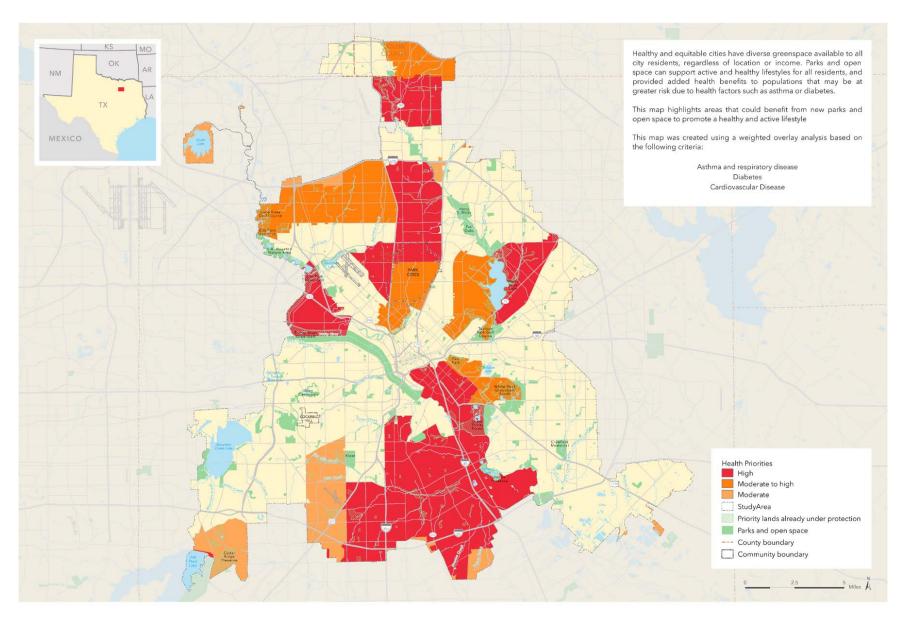


#### Health

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

Criteria	Description
Asthma and respiratory disease	% of people within a zip code affected by asthma, emphysema, chronic bronchitis or sinusitus
Diabetes	% of people within a zip code affected by diabetes
Cardiovascular Disease	% of people within a zip code affected by angina, heart failure, coronary heart disease, heart attack, hypertension, or stroke





#### Health

CLIMATE-SMART CITIES: SMART GROWTH FOR DALLAS



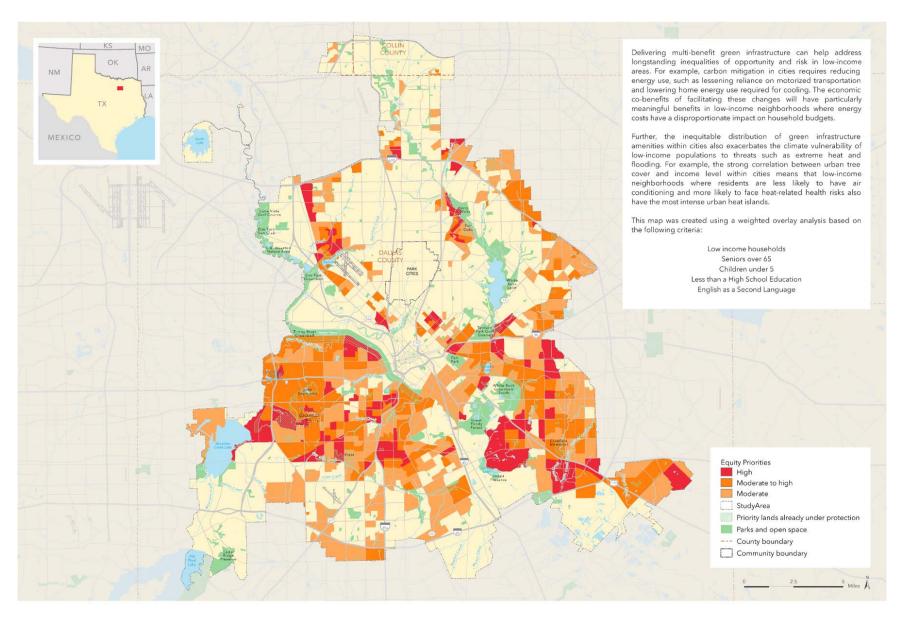
## **Equity**

Reduce barriers between social groups, improve park access for vulnerable and underserved populations, and make Dallas's parks and open space more equitable.

Criteria	Description
Low income households	% of households within a block group with an annual income less that \$25k
Seniors over 64	% of population within a block group over 64 years of age
Children under 5	% of population within a block group younger than 5 years of age
Less than a High School Education	% of population within a block group with less than a high school education
English as a Second Language	% of households within a block group where no one age 14 and over speaks English "very well" or speaks English only

<sup>\*</sup>From EPA's Environmental Justice Screen, a nationally consistent dataset that combines environmental and demographic indicators in maps and reports.







CLIMATE-SMART CITIES: SMART GROWTH FOR DALLAS

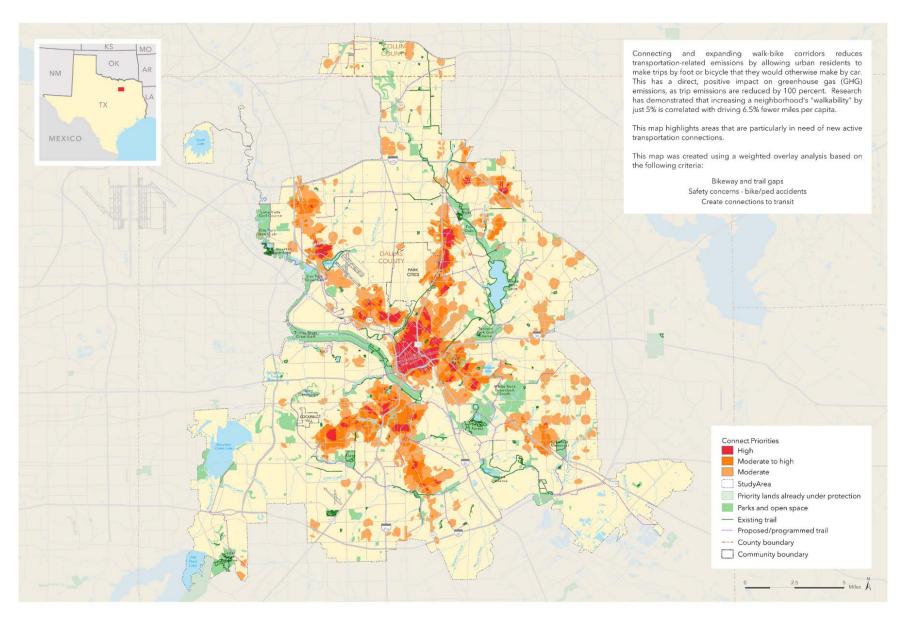




## Enhance active transit connectivity through analysis of existing and planned bike infrastructure

Criteria	Description
Bikeway and trail gaps	Areas that lack access to trail and bike infrastructure based on existing and approved (funded) planned trails
Safety concerns – bike/ped accidents	Areas where there are safety concerns for bicyclists and pedestrians based on the density of vehicle-pedestrian and vehicle-bicycle crashes
Create connections to transit	Areas where green infrastructure can help connect people to public transit (Light rail and streetcar, where light rail was weighted higher)





#### Connect

CLIMATE-SMART CITIES: SMART GROWTH FOR DALLAS

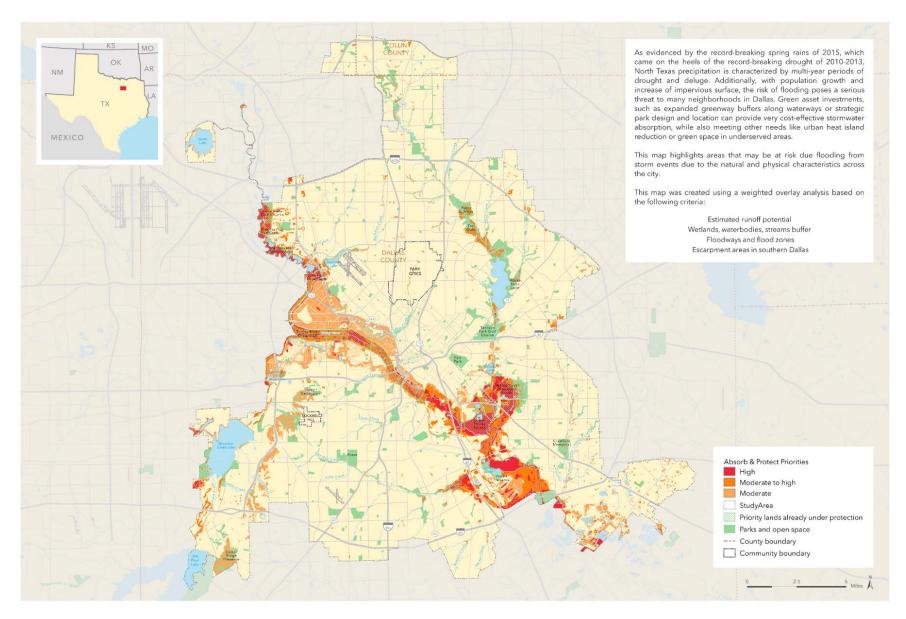


# Absorb & Protect

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.

Criteria	Description
Estimated runoff potential	Areas with potential for high amounts of runoff & flooding during storms. Calculated using soil type and land use information.
Wetlands, waterbodies, streams buffer	Wetlands, waterbodies and streams buffered by 100 feet to create high priority areas.
Floodways and flood zones	FEMA's floodzone areas were translated directly into priority areas
Escarpment areas in southern Dallas	Escarpment areas in southern Dallas, mapped by the city, were buffered by 200 feet.





#### Absorb & Protect

CLIMATE-SMART CITIES: SMART GROWTH FOR DALLAS

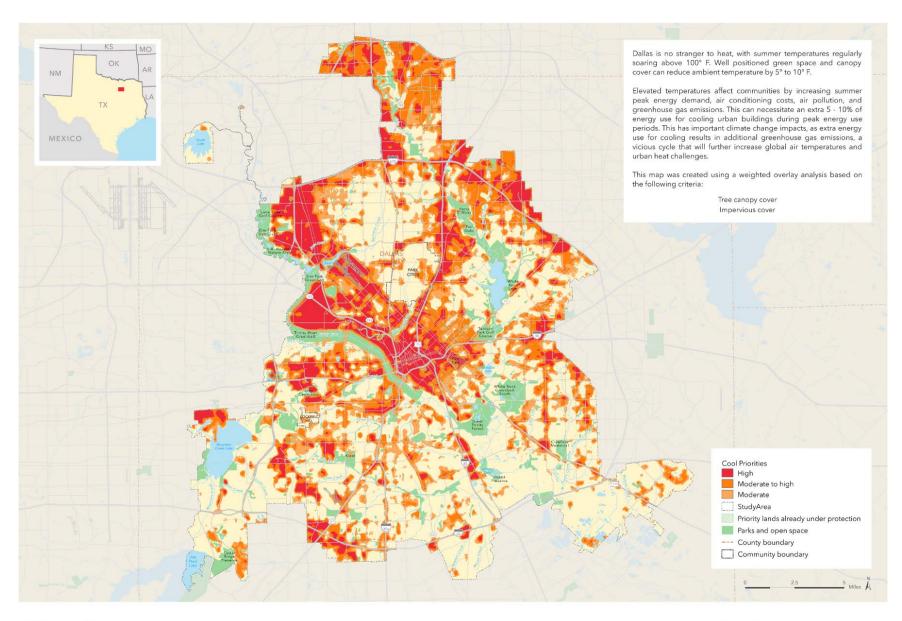


Reduce heat island impacts through strategic investment in green assets.

#### **Cool**

Criteria	Description
Tree canopy cover	Areas with low tree canopy cover
Impervious cover	Areas with high percentage of impervious cover

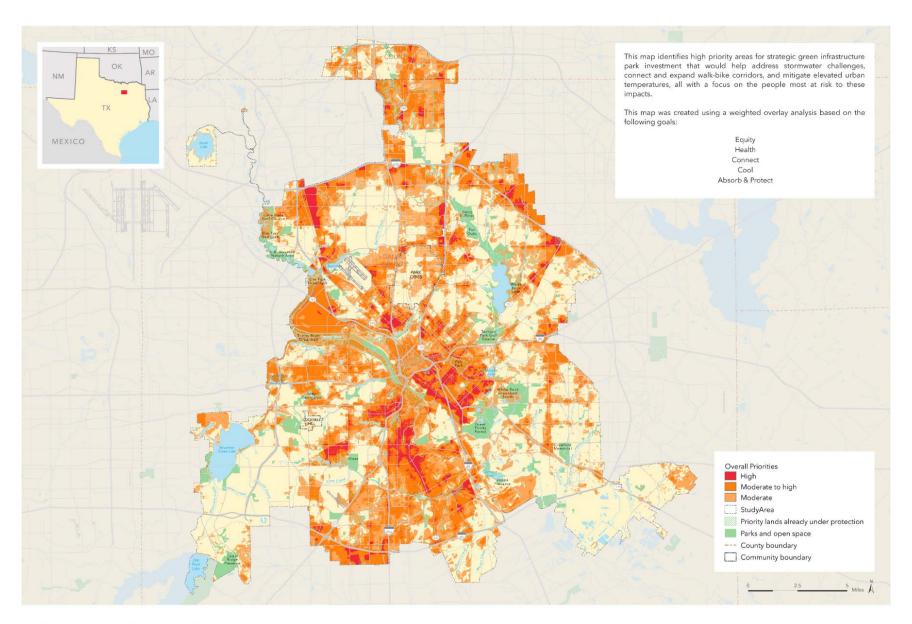






CLIMATE-SMART CITIES: SMART GROWTH FOR DALLAS



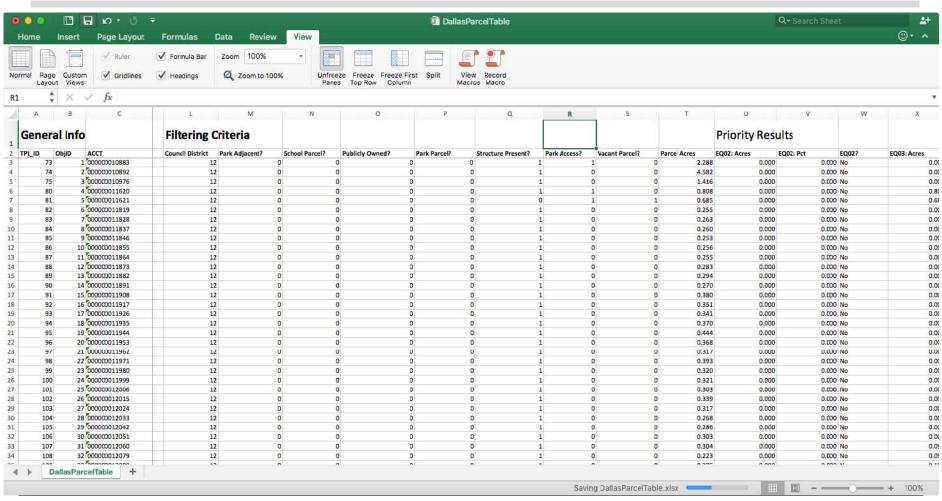


#### **Overall Priorities**

CLIMATE-SMART CITIES: SMART GROWTH FOR DALLAS



#### **Parcel Table**



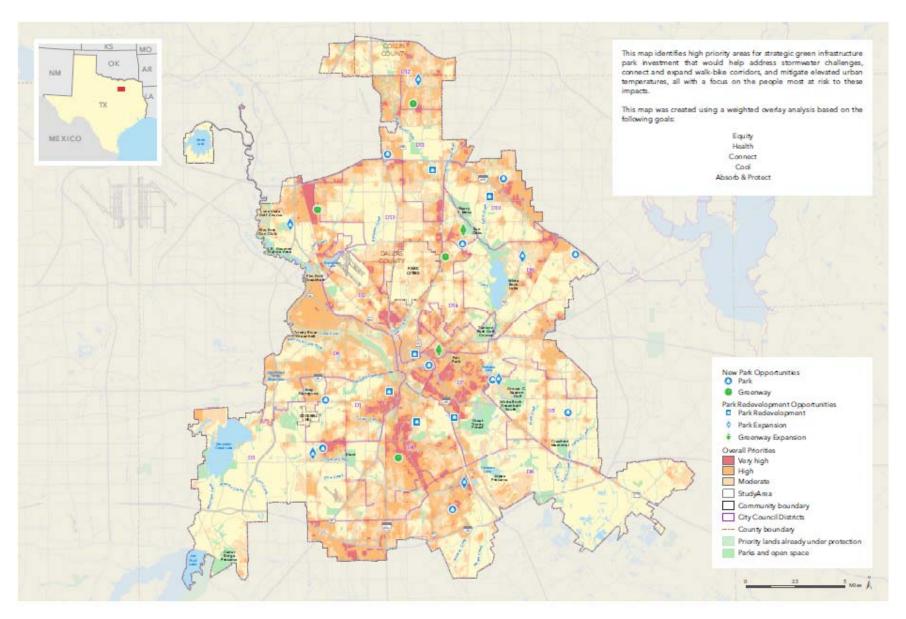


# II. PHASE I DELIVERABLES High-Priority Opportunities

#### How much land is available for parks?

- We identified over 3,500 acres of land that we consider "high opportunity" for new park development.
  - 1,600 acres are publicly owned (City of Dallas, DART, etc.)
  - 1,900 acres are privately owned
  - All land is considered vacant
  - In areas currently underserved by parks
- The county appraisal districts value the privatelyowned land at \$117 million.
- If we consider just the five largest park creation opportunities in each council district, we have identified 669 acres of land, valued at \$52 million.



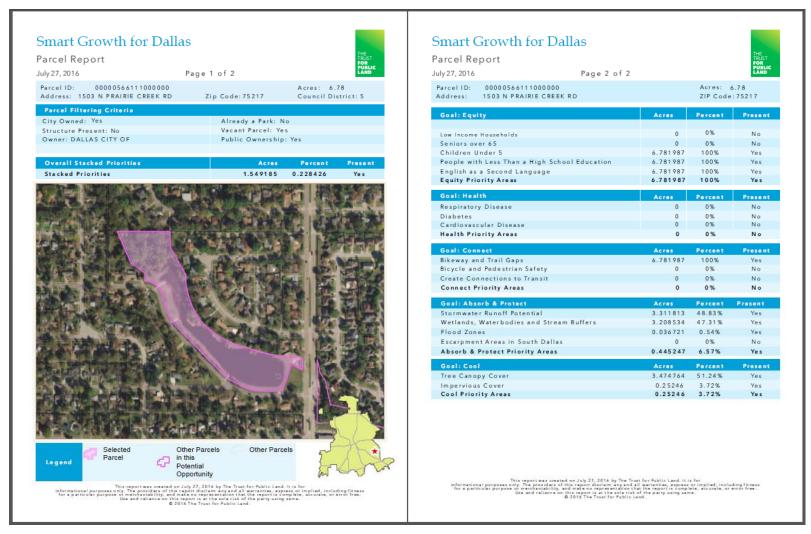


#### Overall Priorities & Illustrative Opportunities

CLIMATE-SMART CITIES: SMART GROWTH FOR DALLAS



## Data-informed and strategic decisions





## Finding land for new parks

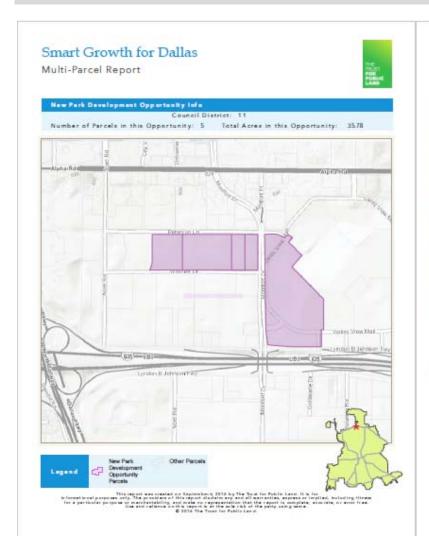


Parcel Report			1600	
uly 27, 2016 Page 2 of 2	5		POR PUBLIC LAME	
Parcel ID: 00000640504010000 Address: 3380 SIMPSON STUART RD		Acres: 13.03 ZIP Code: 7524		
Gost: Equity	Acres	Percent	Present	
Low locome Households	13.034586	100%	Yes	
Seniors over 65	13.034586	100%	Yes	
Children Under 5		0%	No	
People with Less Than a High School Education	13.034586	100%	Yes	
English as a Second Language	0	0%	No	
Equity Priority Areas	13.034586	100%	Yes	
Gual: Health	Acres	Percent	Present	
Respiratory Disease	13.034586	100%	Yes	
Diabetes	13.034586	100%	Yes	
Cardiovascular Disease	13.034586	100%	Yes	
Health Priority Areas	13.034586	100%	Yes	
Goal: Connect	Acres	Percent	Present	
Bikeway and Trail Gaps	13.034586	100%	Yes	
Bicycle and Pedestrian Safety	0	0%	No	
Create Connections to Transit	0	0%	No	
Connect Priority Areas	8.548851	65.59%	Yes	
Goal: Absorb & Protect	Acres	Parcent	Present	
Stormwater Runoff Potential	12.713028	97.53%	Yes	
Wetlands, Waterbodies and Stream Buffers	0	0%	No	
Flood Zones	0	0%	No	
Excarpment Areas in South Dallas	0	0%	No	
Absorb & Protect Priority Areas	0	0%	No	
Goal: Cool	Acres	Percent	Present	
Tree Canopy Cover	13.034586	100%	Yes	
Impervious Cover	0	0%	No	
Cool Priority Areas	5,308005	40.72%	Yes	

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## Evaluating current park proposals

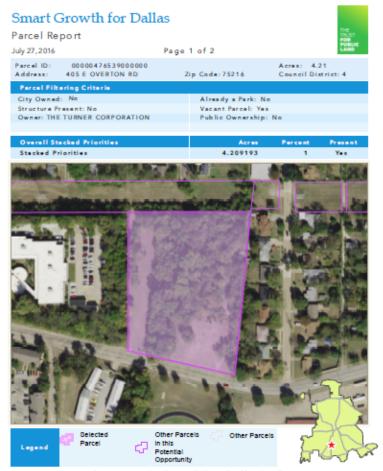


Smart Growth for Dallas						
arcel Report			POR PUBLIC LANG			
eptember 6, 2016 Page 2 of 2			CAME			
Parcel ID: 0000066324000000 Address: 5444 PETERSON LN		Acres: 4.49 ZIP Code: 75240				
Goal: Equity	Acres	Percent	Present			
Law Income Households	0	0%	No			
Seniors over 65	0	0%	No			
Children Under 5	0	0%	No			
People with Less Than a High School Education	0	0%	No			
English as a Second Language	4.49	100%	Yes			
Equity Priority Areas	4.40	100%	Yes			
Goal: Health	Acres	Percent	Present			
Respiratory Disease	0	0%	No			
Diabetes	.0	0%	No			
Cardiovascular Disease	0	0%	No			
Health Priority Areas		0%	No			
Goal: Connect	Acres	Percent	Present			
Bikeway and Trail Gaps	4.49	100%	Yes			
Bicycle and Pedestrian Safety	1.57	34.9%	Yes			
Create Connections to Transit	0	0%	No			
Connect Priority Areas	3.15	70.0%	Yes			
Goal: Absorb & Protect	Acres	Percent	Present			
Stormwater Runoff Potential	4.49	100%	Yes			
Wetlands, Waterbodies and Stream Buffers	0	0%	No			
Flood Zonex	0	0%	No			
Excarpment Areas in South Dallas	0	0%	No			
Absorb & Protect Priority Areas	.0	0%	No			
Goal: Cool	Acres	Percent	Present			
Tree Canopy Cover	4.49	100%	Yes			
Impervious Cover	4.49	100%	Yes			

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## Connect trails to transit and other destinations



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Smart C Parcel Re	Growth for Dallas			THE THUST
luly 27, 2016	Page 2	of 2		PUBLIC
Parcel ID: Address:	00000476539000000 405 E OVERTON RD		Acres: . ZIP Code	
Goal: Equi	ty	Acres	Percent	Present
Low Income	Households	4.209193	100%	Yes
Seniors ove		0	0%	No
Children U		0	0%	No
People with	Less Than a High School Education	4.209193	100%	Yes
English as	s Second Language	4.209193	100%	Yes
Equity Prior	rity Areas	4.209193	100%	Yes
Goal: Heal	th	Acres	Percent	Present
Respiratory	Dixease	4.209193	100%	Yes
Diabetes		4.209193	100%	Yes
	ular Disease	4.209193	100%	Yes
Health Pric	rity Areas	4.209193	100%	Yes
Goal: Conn	ect	Acres	Percent	Present
Bikewayan	d Trail Gaps	4.209193	100%	Yes
	Pedestrian Safety	0	0%	No
	nections to Transit	0	0%	No
Connect Pr	iority Areas	0	0%	No
Goal: Abso	rb & Protect	Acres	Percent	Present
	Runoff Potential	4.209193	100%	Yes
	Waterbodies and Stream Buffers	0	0%	No
Flood Zones		0	0%	No
	t Areas in South Dallas	0	0%	No
Absorb & F	rotect Priority Areas	0	0%	No
Goal: Cool		Acres	Percent	Present
Tree Canop	y Cover	2.366087	56.21%	Yes
Cool Priori		0	0%	No No

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## Expand and re-imagine existing parks



Parcel Report			THE STATE OF
July 28, 2016 Page 2 of 2			POR PURCE LAND
Parcel ID: 00000734836000000 Address: 7100 LBJ FWY		Acres: 1.59 ZIP Code:75230	
Goal: Equity	Acres	Percent	Present
Low Income Households	0	0%	No
Seniors over 65	1.589894	100%	Yes
Children Under 5	0	0%	No
People with Less Than a High School Education	0	0%	No
English as a Second Language	0	0%	No
Equity Priority Areas	0	0%	No
Goal: Health	Acres	Parcent	Present
Respiratory Disease	1.589896	100%	Yes
Diabetes	1.589896	100%	Yes
Cardiovascular Disease	1.589896	100%	Yes
Health Priority Areas	1.589896	100%	Yes
Goal: Connect	Acres	Percent	Present
Bikeway and Trail Gaps	0	0%	No
Bicycle and Pedestrian Safety	0	0%	No
Create Connections to Transit	0	0%	No
Connect Priority Areas	0	0%	No
Goal: Absorb & Protect	Acres	Percent	Present
Stormwater Runoff Potential	1.589896	100%	Yes
Wedlands, Waterbodies and Stream Buffers	0	0%	No
Flood Zones	0	0%	No
Excarpment Areas in South Dallas	0	0%	Na
Absorb & Protect Priority Areas	0	0%	No
Goal: Cool	Acres	Percent	Freemal
Tree Canopy Cover	1.589896	100%	Yes
Impervious Cover	1.589896	100%	Yes
Cool Priority Areas	1.589896	100%	Yes

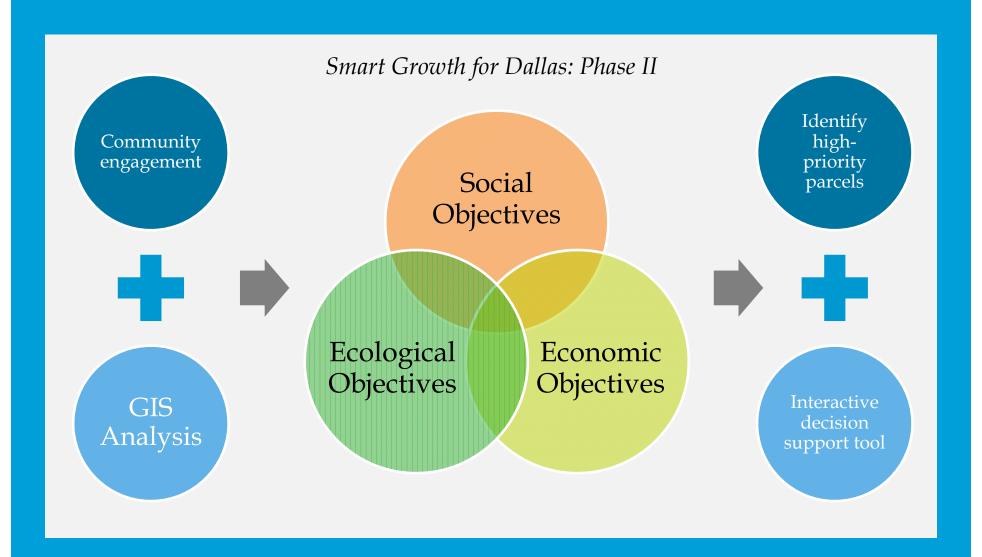
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## V. INTRODUCING PHASE II

## PHASED APPROACH:



#### **Additional Deliverables**







## **Expanded GIS Analysis and Interactive Decision Support Tool**





#### EXPANDED GIS ANALYSIS

- Addition of dozens of new GIS layers to model
- Addition of new planning objectives, including Activate Educate
- Incorporate new Texas Trees Foundation urban heat island research

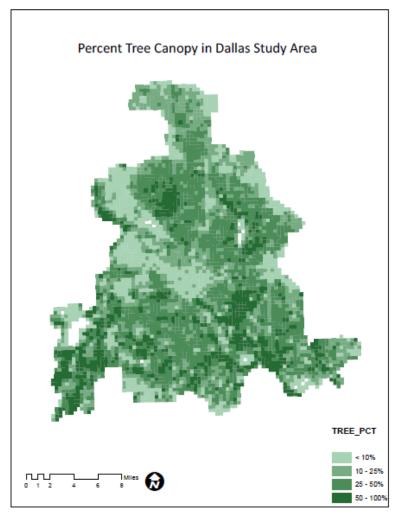
#### DECISION SUPPORT TOOL

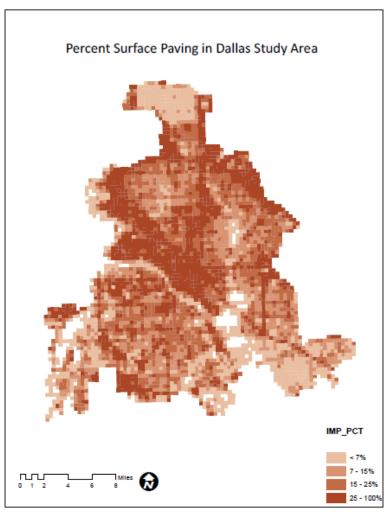
- Interactive web-based platform to provide customizable map-based analysis of land in Dallas, based on identified economic, social, and ecological objectives.
- Provides extensive data and priority modeling results at the parcel level
- Users may identify high-value parcels, analyze parcels against spatial data, and make individual parcel reports

#### ECONOMIC ANALYSIS

 Economic analysis of recreation, health, and property value benefits of potential new parks

#### **Urban Heat Island Analysis**



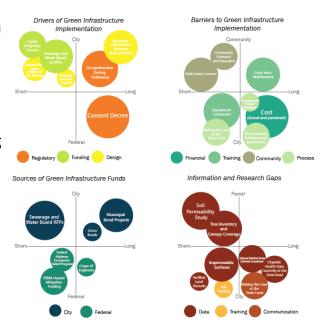




## **Identifying Use Cases**

- CURRENT CONDITIONS ANALYSIS

  Identify key opportunities, barriers, funding
  sources, key decision makers, and information gap
  related to implementation of multi-benefit
  greening.
- **IDENTIFY USE CASES**Using current conditions analysis, identify use cases for decision support tool. Through this iterative process, patterns, common themes, and shared opportunities are identified.
- **DEVELOP PROJECT TYPOLOGIES**Use cases are further refined, including identification of ad-hoc "early win" projects.
  Identify long-term, self-sustaining programs (e.g. green alleys or schoolyard conversions).









For Dallas to make the smartest investments possible and ensure we're setting ourselves up as a city of great public spaces – we need to know information that can't be captured by quantitative data alone.





We need to know how residents use parks, which parks they are or are not using, and what drives their use of parks. And we need to ask them to dream and help us imagine what these parks should be – they're the experts.





Their local knowledge increases our ability to identify all the nooks and crannies of Dallas that are potential public spaces and connectors. Local knowledge helps us better understand and interpret the data we already have.



#### **SCHEDULE**

- Online survey available today at: www.SmartGrowthForDallas.org
- 8 large community meetings:
  - Establish what questions we still need to ask
  - Inform the public about the technology that's being developed
  - Gather collective input for Dallas' investment in parks and public space.

Community Engagement Kickoff Meeting: November 10, 2016 @ Heritage Village 5:30pm



#### **SCHEDULE**

- 20 small meetings to engage an array of experts on parks and open space to better understand how they're used, how they work, and how they're maintained.
  - Dates TBD: Friends of parks groups, parks maintenance, parks and open space advocates, neighborhood groups, and others to be decided
- City-wide convening to report engagement findings
  - Early 2017
- 4 city-wide convening's to report final products
  - Early 2018

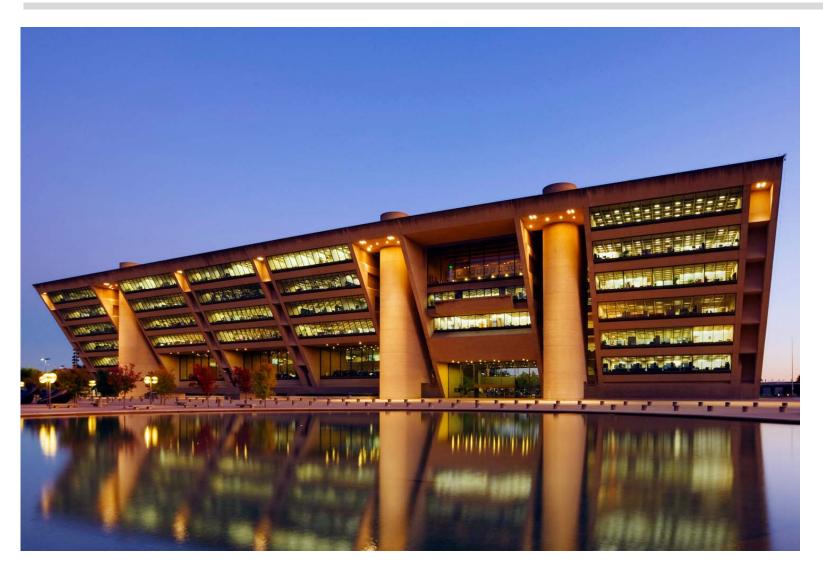


#### **MEDIA**

- Web updates
- SmartGrowthForDallas.org
- Park Stories short film series



## Open data for the public good











INTELLIGENCE + PARTNERSHIP + LEVERAGE

## Dallas is falling behind on investment

спу	TOTAL SPENDING	OPERATING SPENDING PER RESIDENT	CAPITAL SPENDING PER RESIDENT	TOTAL SPENDING PER RESIDENT
Seattle	\$187,501,978	\$200	\$81	\$281
San Francisco	205,298,303	186	54	241
Minneapolis	90,488,104	186	36	222
Washington, D.C.	144,370,876	142	77	219
St. Louis	66,746,000	62	148	210
New York	1,740,630,989	120	85	205
St. Paul	61,092,606	162	43	205
Irvine	49,867,182	152	48	201
Arlington, Virginia	44,394,253	162	34	196
Long Beach	92,573,976	111	85	195
Cincinnati	55,958,281	137	51	188
Virginia Beach	83,664,985	138	47	186
Tampa	64,192,596	155	24	179
Chicago	470,727,611	134	39	173
Portland	106,261,275	153	19	172
Henderson	44,977,300	122	40	162
Raleigh	69,750,674	108	51	159
Plano	43,761,808	95	62	157
Atlanta	66,824,811	120	27	147
<b>1</b>		1	1	1
Dallas	97,520,012	52	24	76



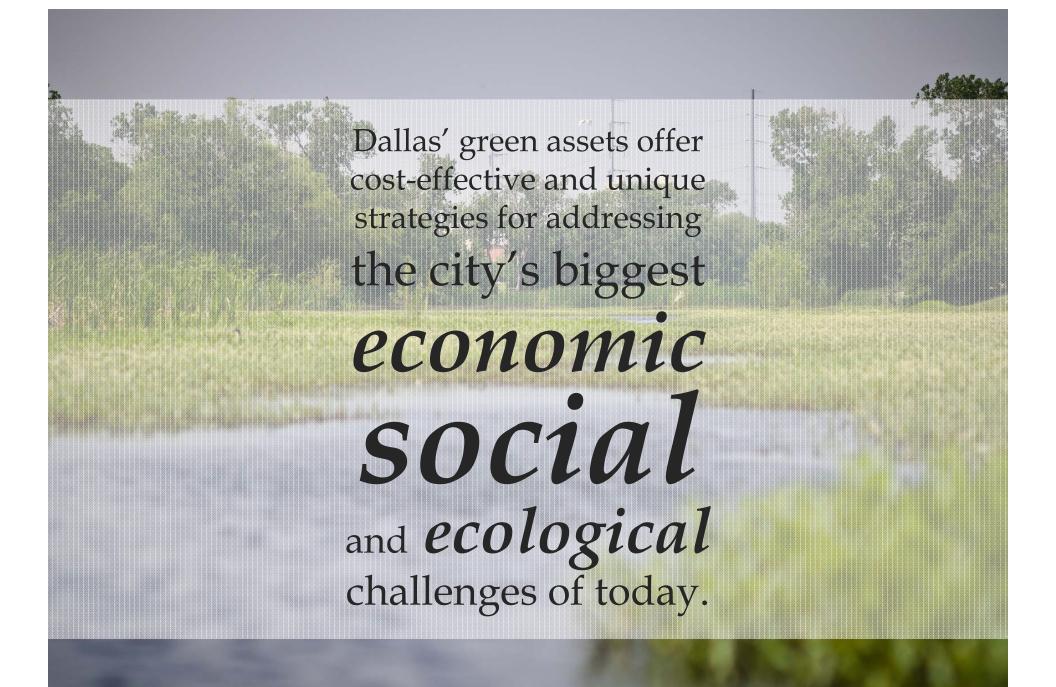
## The power of leverage

A recent study by HR&A Advisors found that in Dallas:

- Investments in Dallas's parks yield a 1:7 return
- Investments in Dallas's trails yield a 1:50 return
- Each year, the Dallas parks system generates
   \$678 million in economic benefits
- Each \$1 increase in spending per resident leads to an \$8.9m increase in economic benefits for the entire city.

And with land value only increasing, now is the time to act.





#### **Contact Us**



#### Robert Kent

The Trust for Public Land North Texas Area Director

*e*: <u>robert.kent@tpl.org</u> | t: 469-615-5448



#### Lizzie MacWillie

building community WORKSHOP

e: <u>lizzie@bcworkshop.org</u> | t: 718-757-9568



#### Matt Grubisich

The Texas Trees Foundation

Operations Director & Urban Forester

*e*: <u>matt@texastrees.org</u> | *t*: 214-953-1184