

A PRESCRIPTION FOR DALLAS

SOUTHWESTERN MEDICAL DISTRICT TRANSFORMATION



**URBAN NATURE
BASED SOLUTION**

TRANSFORMING DALLAS FOR NATURE AND HEALTH

The Southwestern Medical District in Dallas, Texas is anchored by three hospitals that deliver renowned health care in partnership with innovative, world-class research and education. The district thrives on the presence and well-being of its diverse community, encompassing patients, healthcare professionals, students, residents, business owners, and visitors.

The District spans 1,000 acres and is home to three of the state's most renowned healthcare institutions—Parkland, UT Southwestern Medical Center, and Children's Health System of Texas. More than 42,178 people work here, and nearly 3.4 million more visit its clinics and emergency rooms every year. It is also the hottest part of the city. Thanks to its miles upon miles of concrete, this is Dallas' largest urban heat island.

Tree canopy covers just 7 percent of the Medical District, well below the 40 percent that arborists recommend to reduce ambient heat. That means the sun's rays hit the cement and soak in, causing heat to radiate outward over time. With little tree canopy, the urban heat island effect can be 15+ degrees hotter than the reported temperature.

The District and our leadership at Texas Trees Foundation say Dallas deserves a better place that is meant for healing and health beyond the footprint of the buildings. Through our collaborative partnership with the three hospital partners in the District, the SWMD Urban Streetscape and Park Transformation Project will become the new model for what a medical district should be: a more holistic, green campus that unites the community, promotes health, healing, and safety, and acts as an 'intersection of health and nature'.

The Foundation is dedicated to elevating the District's mission of health and healing. Driven by an 'evidence-based design approach to nature based solutions', the project will transform a 2-mile segment along the Harry Hines Corridor, spanning from Treadway Street to Lucas Drive, into a greener, safer, and multi-modal thoroughfare. It will also construct a 8-acre Green Park at the intersection of Harry Hines and Inwood Road.

The new vision of how we can transform our streetscapes within our cities from car-centric to people-centric is changing business as usual. That's exactly what we are doing in the Southwestern Medical District. We are setting an example for the nation by leading that change at home.



Dan Patterson

DAN PATTERSON

Board Chair



Janette Monear

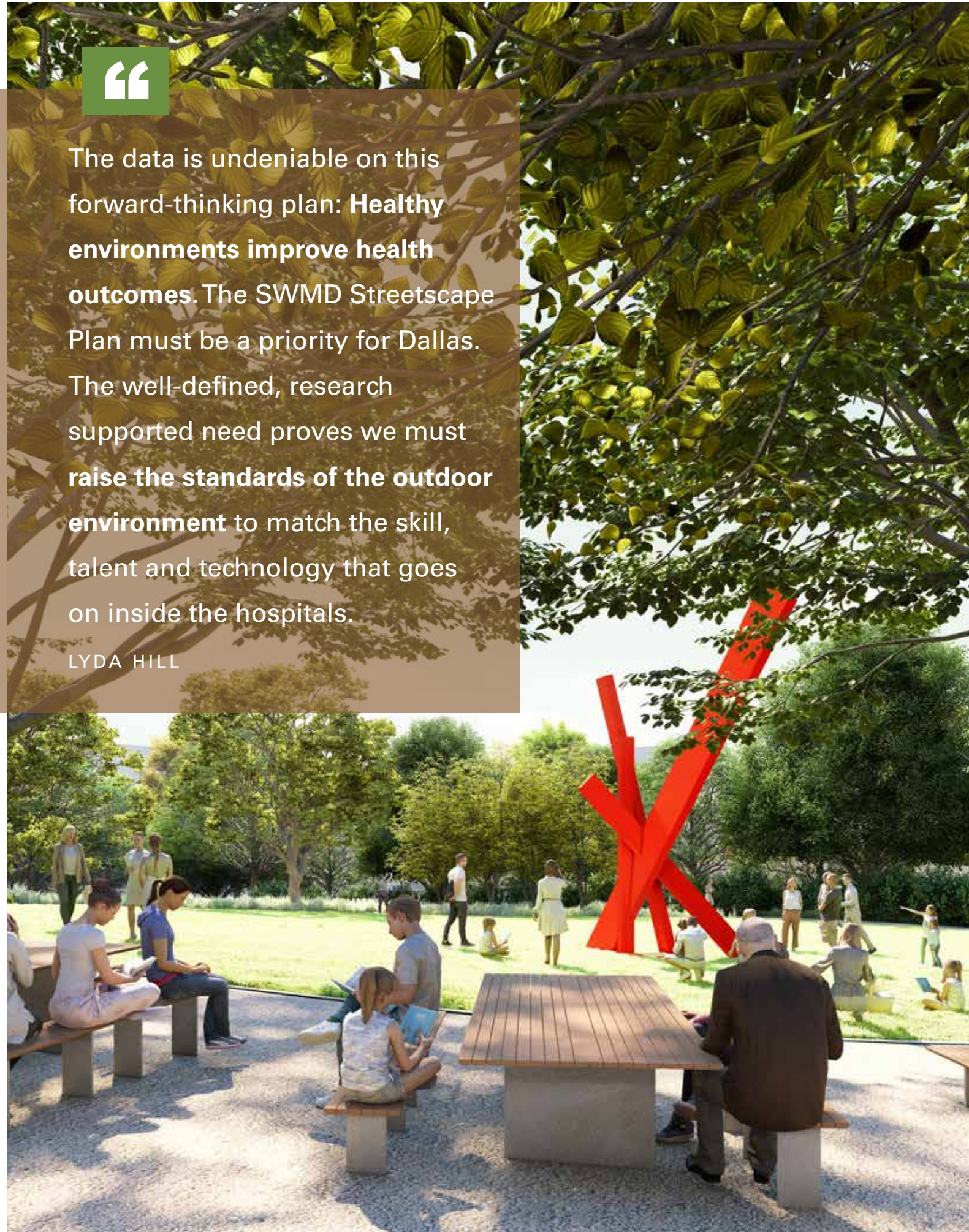
JANETTE MONEAR

President and CEO



The data is undeniable on this forward-thinking plan: **Healthy environments improve health outcomes.** The SWMD Streetscape Plan must be a priority for Dallas. The well-defined, research supported need proves we must **raise the standards of the outdoor environment** to match the skill, talent and technology that goes on inside the hospitals.

LYDA HILL



REDESIGNING THE SOUTHWESTERN MEDICAL DISTRICT FOR HUMAN HEALTH

With less than 7% tree canopy, the impacts of the Southwestern Medical District (SWMD) heat island negatively affect human health. Through our evidence-based urban streetscape design, we aim to augment the quality of healthcare provided by the hospitals by leveraging the natural environment.

3 MAJOR HOSPITALS



CREATING A HEALTHY MEDICAL DISTRICT

The Southwestern Medical District in Dallas, Texas is home to world-renowned hospitals and is a **place of innovation, hope and healing**. Step outside of these remarkable institutions and into the streetscape and a less vibrant and healthy story emerges...

Texas Trees Foundation is rewriting the story by leading a visionary, therapeutic landscape redesign to transform

the antiquated Harry Hines corridor from Treadway Street to Lucas Drive into a vibrant, connected, and safe multi-modal linear parkway with a 8-acre central park.

Through a lens of robust engagement, the holistic restructuring will focus on evidence-based design that enhances the environment, uplifts adjoining neighborhoods and businesses, spurs economic development, and nurtures the body, mind, and spirit of the over 3 million individuals who experience the district annually.

3.4 MILLION
PATIENTS

42,178+
EMPLOYEES

3,791
STUDENTS/RESIDENTS/
FELLOWS

12,000
LIVING IN AREA

A NATIONAL DILEMMA. A LOCAL SOLUTION.

Despite projected growth and the renowned medical status, there remains a significant amount of untapped potential to improve the overall health of the environment, infrastructure and people within the SWMD.

AGING INFRASTRUCTURE

On a national level, street infrastructure is exhausted and failing. The American Society of Civil Engineers estimates a \$2.6 trillion investment is needed to bring America's infrastructure up to an acceptable grade. The SWMD's antiquated infrastructure and public rights-of-way are due for significant upgrades. The critical need for updated infrastructure provides the opportunity to reimagine the function of streets and consider how the public realm can be enhanced to accommodate all transportation modes and users.



URBAN HEAT ISLAND EFFECT

Findings from the 2015 State of the Dallas Urban Forest Report and the 2017 Urban Heat Island Management Study, prepared by Texas Trees Foundation, determined that the SWMD is located within the largest urban heat island in Dallas and is one of the hottest areas of the city. The Medical District also possesses a mere 7% tree canopy cover. Thereby, people frequenting the Medical District experience higher temperatures and increased thermal discomfort compared to surrounding rural areas and other neighborhoods in the city due to the urban heat island effect.



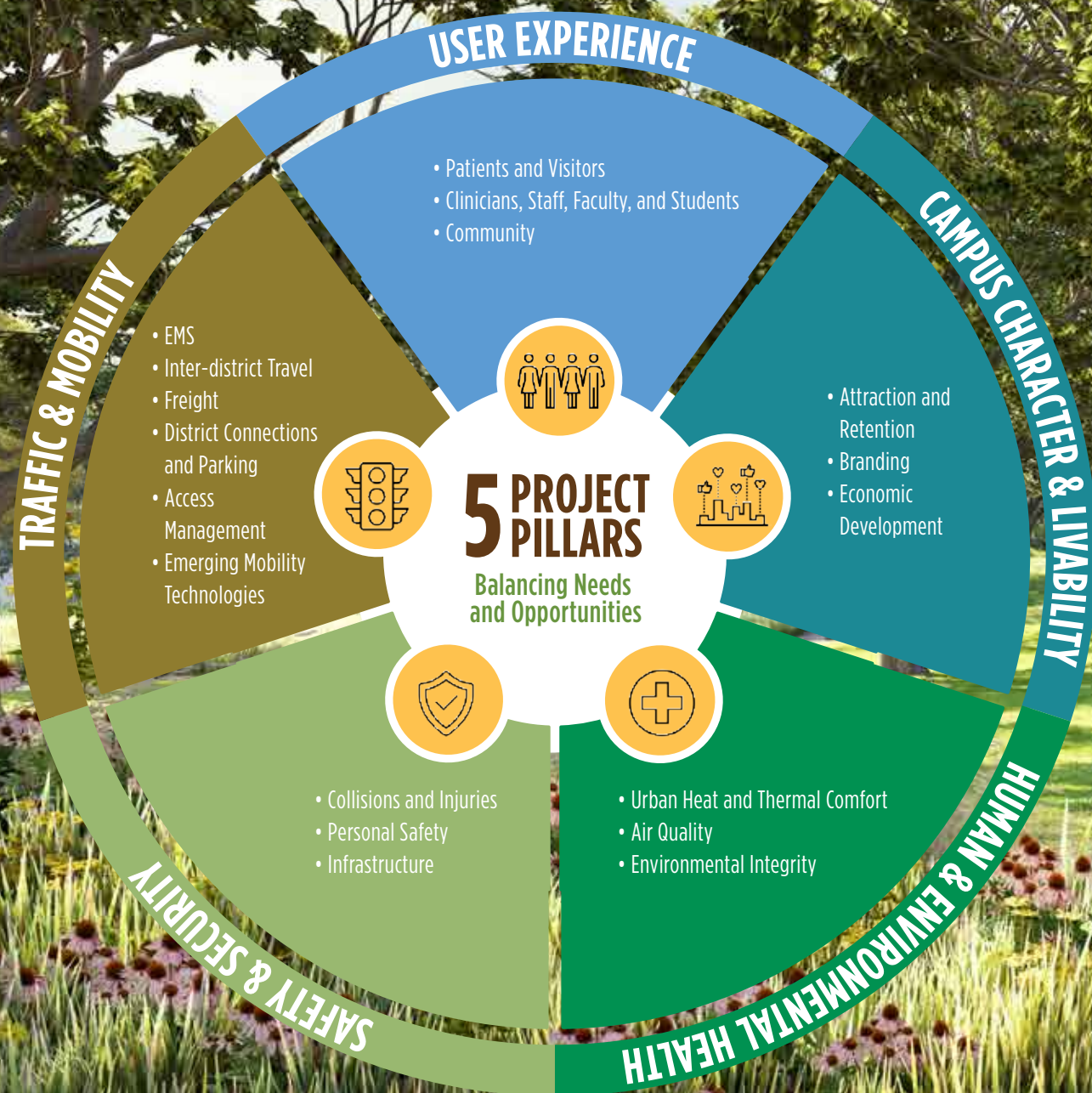
NATURE DEFICIT DISORDER

As populations become more urbanized, people become increasingly more disconnected with the natural environment. This disconnect from nature has been associated with mental health and wellness issues such as nature deficit disorder. According to the World Health Organization, mental health disorders constitute 10% of the global burden of disease. Twenty percent of Dallas County residents reported "not good" mental health. Research agrees that time in nature has many physiological benefits, but it is Roger Ulrich's study, "View Through a Window May Influence Recovery from Surgery", that is especially significant to the context of this project. Patients who had a bedside view of trees had shorter recovery periods (7.96 days) than patients who had a view of a brick wall (8.70 days).



AN APPROACH WITH NATURE IN MIND

EMERGING COMMUNITY VISION imagines Harry Hines as a safe and vibrant street for people who walk, bike, take transit, and drive. It is well-connected to adjoining hospitals, neighborhoods, and key destinations. The redesigned street calms traffic while maintaining emergency access. New streetscape amenities improve physical, social, and mental health while creating an iconic, people-friendly street that meaningfully integrates the natural environment.



Access to nature has been related to lower levels of mortality and illness, higher levels of outdoor physical activity, restoration from stress, a greater sense of well-being, and greater social capital.

AMERICAN PUBLIC HEALTH ASSOCIATION

To align the redesign of Harry Hines in the Medical District with the updated district master plan and to best understand mobility needs going forward, the SWMD team has been working on how to best balance the needs and opportunities along the Harry Hines corridor. We are working together with the district to find balance between initiatives and to finalize measurable objectives that we can use to guide the design efforts. The five project pillars were developed with our three hospital partners.



A HEALTHY APPROACH

The vision of the Southwestern Medical District Transformation effort is to create a livable district that emphasizes and supports the health of the environment, the health of systems, and the health of people. Texas Trees Foundation and our partners worked with the District, Hospitals, and the Community to develop goals within the framework.



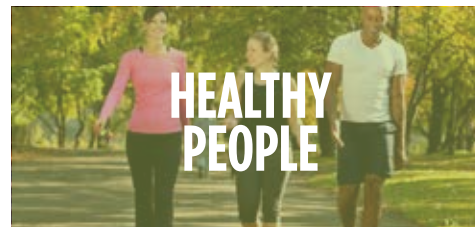
HEALTHY ENVIRONMENT

Healthy environment metrics set benchmarks to measure the proposed framework's success in achieving the SWMD's overall ecological health. This includes strategies to improve air quality, boost overall plant diversity and presence of urban habitat, reduce heat island effect, and manage stormwater.



HEALTHY SYSTEMS

Healthy system metrics set benchmarks to measure the proposed framework's success in achieving efficient systems and connections. This includes strategies to support economic development, improve safety, improve overall connectivity, and utilize modern technology to minimize energy usage.



HEALTHY PEOPLE

Healthy people metrics set benchmarks to measure the proposed framework's success in improving the health of daily visitors and residents. Proposed strategies focus on improving the pedestrian experience in order to promote walking, outdoor recreation and peace of mind.

MEASURABLE IMPACT AND STRATEGY



- Mitigate heat island effect
- Increase tree diversity
- Improve overall air quality and reduce carbon footprint
- Protect, enhance, and create urban habitat to maximize wildlife populations
- Filter and treat storm water



- Build on economic development opportunities
- Utilize smart technologies
- Improve access, connectivity and circulation for multimodal connections throughout and beyond the district
- Minimize overall energy usage along streets



- Increase human comfort
- Improve user health
- Define the SWMD as a destination
- Express the SWMD's history
- Enhance temporal qualities

MORE THAN A STREETScape BUT AN OPPORTUNITY

EQUITABLE ENGAGEMENT

where all people have a direct bridge to express their needs, goals, desires and incorporate their voices.

EVIDENCE-BASED RESEARCH

that marries the disciplines of design and science by modeling, optimizing, and validating design concepts to create a space that maximizes environmental and health benefits.

GREEN INFRASTRUCTURE

creates an urban, nature-based solution to mitigate the urban heat island effect, raise air quality, and reduce carbon footprint and stormwater runoff.

ONE HEALTH APPROACH

to designing a public space that heals, restores, and relaxes, provides opportunities for physical movement, and is an iconic, people-friendly place that meaningfully integrates nature.



It becomes a selling point that you can walk in a connected way through the District with tree coverage. Walking to meetings across campus could be a bigger part of what we're doing, and it connects to the idea of health and wellness, which we're all about.

DR. MARC NIVET, UTSW



I need a place to get my bearings and relieve stress after a trying day with patients.

MEDICAL DISTRICT HEALTH PRACTITIONER



A 2-mile linear natural parkway with a 8-acre central park for health and healing in the Southwestern Medical District embodies the importance and commitment to the City of Dallas's intention to invest in green spaces that will not only attract new talent and economic opportunities but also transforms an old and neglected 1940s highway into a safe, connected, and healthier medical district.

MAYOR ERIC JOHNSON



The Southwestern Medical District Board in partnership with the Texas Trees Foundation and our stakeholders are transforming the streetscape of Harry Hines into a green, healthy, connected, and safe linear parkway with a central park. Completion of this vision will have an impact on every medical professional, student, patient, and visitor in this critically important District.

DAVID BIEGLER, CHAIRMAN, SOUTHWESTERN MEDICAL DISTRICT

GREEN SPINE



GREENING 2 MILES OF PUBLIC RIGHT OF WAY

This streetscape transformation will set a new standard for healthy communities, especially in a setting for healing, and it will elevate the District's status as an economic engine for the City and region.



HARRY HINES BOULEVARD is the primary multi-modal corridor running through the heart of the SWMD. High-volume traffic at speeds of 45 mph inhibit pedestrian access and contribute to the dysfunction and lack of safety in the area. This signature corridor currently divides the SWMD, but has the opportunity to knit the institutions together through green infrastructure and connected walkways, integrated wayfinding, and place making that will brand the uniqueness of this district. Traffic calming methods and SMART traffic signals will improve safety while still allowing emergency vehicles immediate access to ER facilities.

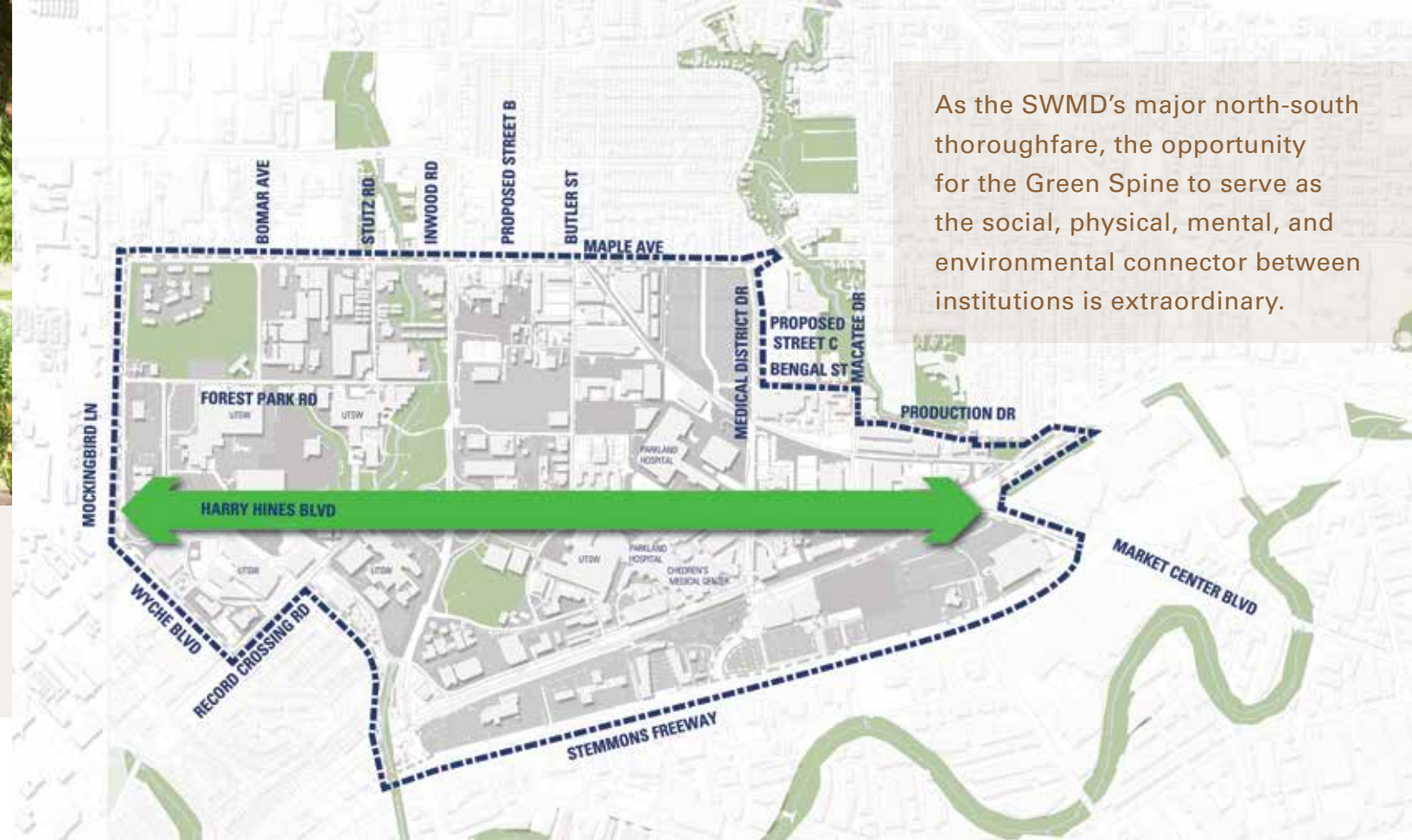


I do not walk between destinations because of unsafe pedestrian crossing at intersections and the failure of auto traffic to yield to pedestrians.

COMMUNITY COMMENT

The corridor is divided by a large median that will be narrowed down to allow pedestrians, especially those with disabilities, easier access across Harry Hines Boulevard. Healthy, mature trees that grace the back of curb area will be supplemented with newer trees that provide a greater biodiversity and capture air pollutants. Existing unhealthy trees will be removed and replaced with a variety of species to maintain thermal comfort.

As the SWMD's major thoroughfare, the opportunities for Harry Hines Boulevard to become a unifying Green Spine are extraordinary. Its central location, relevance to traffic mobility and connection to the Green Park offers an opportunity for the corridor to be transformed into the signature boulevard, or Green Spine, of the SWMD.



As the SWMD's major north-south thoroughfare, the opportunity for the Green Spine to serve as the social, physical, mental, and environmental connector between institutions is extraordinary.

URBAN NATURE BASED SOLUTION



GREEN PARK



TRANSFORMING ASPHALT TO 8 ACRES OF GREENSPACE

The vision for the Green Park transforms an existing, outdated 1940's highway and expanding Medical District into a new, iconic 'living' center for the greater Campus Landscape that both connects and serves the diverse medical, academic, and residential user groups within the Medical District.



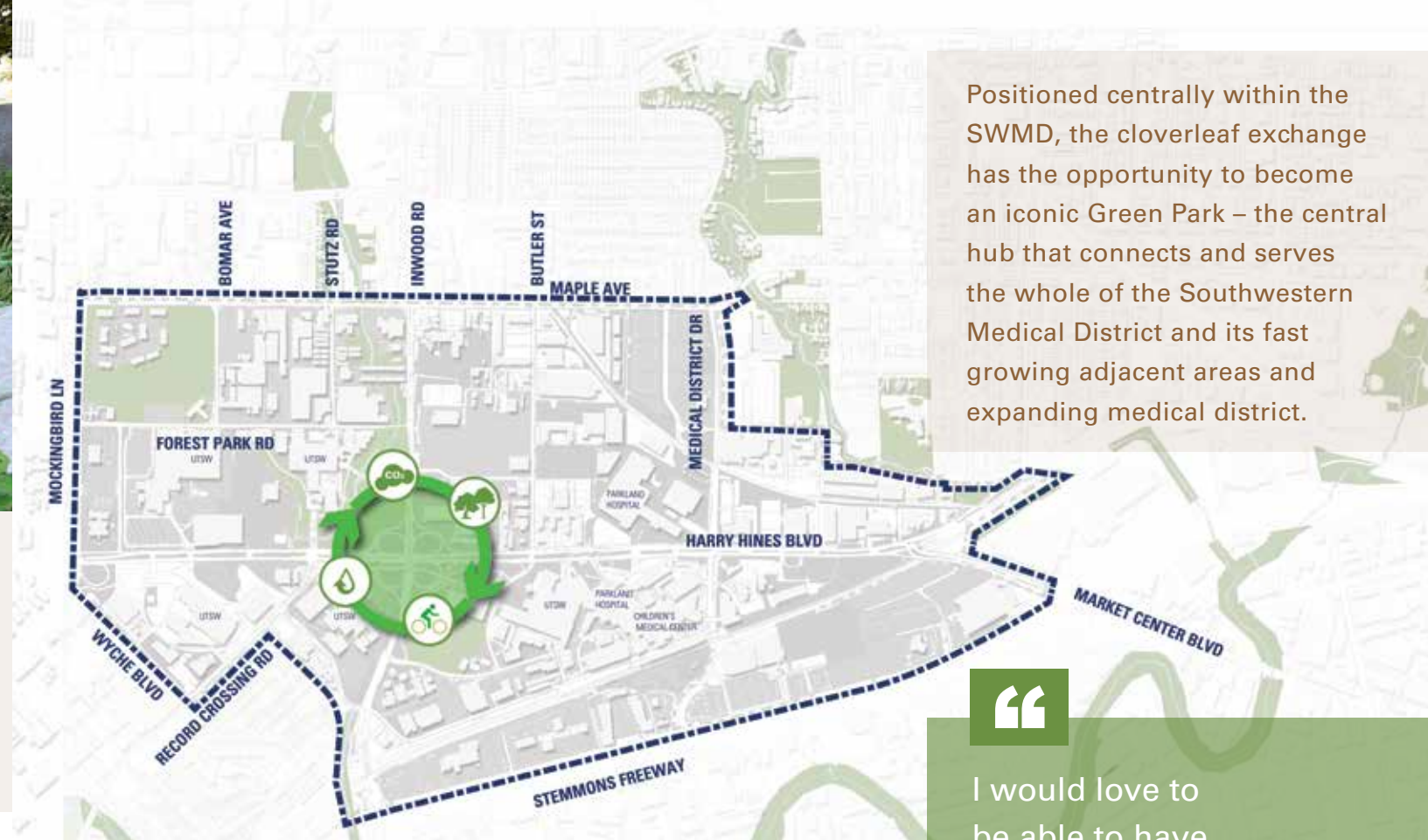
TRANSFORMING
**ASPHALT
AND STEEL**
INTO A
**HEALTHY
COOL
CLEAN AND
GREEN
OASIS**

THE NEW PARK WILL BE A BEAUTIFUL, RICH, AND COMPLEX LANDSCAPE ENVIRONMENT

lifted over Inwood Rd and fronting either side of Harry Hines Blvd, the 'Green Spine.' This sculptural pedestrian bridge will unify and connect the Medical District. The three million users of the Green Park will enjoy pedestrian pathways and gathering spaces, gardens, vantage points, transit services, food and beverage kiosks and innovative storm water management.

The continuous shade coverage provided by the formal and informal tree plantings will provide relief from the urban heat island. Pedestrian trails will meander throughout the park and all lead back to the Green Spine and the Central Campus Plaza.

Its location and design position the Green Park to become a signature destination for the DFW Metroplex, while providing amenities for neighbors, patients and their families, medical students, employees and regional visitors.



Positioned centrally within the SWMD, the cloverleaf exchange has the opportunity to become an iconic Green Park – the central hub that connects and serves the whole of the Southwestern Medical District and its fast growing adjacent areas and expanding medical district.



I would love to be able to have more meetings in outdoor spaces. I love walking one-on-one with staff. It's a "brain break."

SWMD MEDICAL PROVIDER



PARK AMENITIES

- ACCESS TO NATURE**
Meandering loops, an escarpment walk, and tree grove areas
- GATHERING SPACES**
Picnic spaces, plazas, and open lawns
- HEALTH AND WELLBEING**
Opportunities for rest, contemplation, movement, and socialization
- FOOD TRUCKS**
- ART**
- GARDENS**

TOGETHER WE ARE REDESIGNING THE SOUTHWESTERN MEDICAL DISTRICT FOR HUMAN HEALTH

THE SOUTHWESTERN MEDICAL DISTRICT THRIVES on the presence and well-being of its diverse community, encompassing patients, healthcare professionals, students, residents, business owners, and visitors. The mission of Texas Trees Foundation's SWMD Urban Streetscape and Park Project is to reduce urban heat in the area and elevate the usability and appeal of Dallas's world-renowned Medical District – through a green revitalization of a 2-mile stretch along the District's Harry Hines Corridor, extending from Treadway Street to Lucas Drive. This industry leading project, centered on evidence-based design (EBD), will introduce a 8-acre Green Park, bicycle and pedestrian pathways – among other improvements. This reimagined Harry Hines Corridor is designed to enhance the overall user experience, improve the character of the District, promote better quality of life, safeguard human and environmental health, strengthen safety and security measures, and enhance traffic flow and mobility throughout the SWMD community.



Through our collaborative partnership with the three hospital partners in the District, the SWMD Urban Streetscape and Park Transformation Project will become the new model for what a medical district should be: a more holistic, green campus that unites the community, promotes health, healing, and safety, and acts as an 'intersection of health and nature'.

DAN PATTERSON, BOARD CHAIR, TEXAS TREES FOUNDATION

PARTNERS IN THE REVIVAL OF NATURE IN DALLAS

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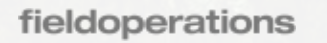
SWMD 4-PERSON COMMITTEE

SWMD PLANNING ADVISORY COMMITTEE

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The Green Park is an important context-sensitive solution at the heart of the Southwestern Medical District that will replace the aging cloverleaf infrastructure at Harry Hines Blvd. and Inwood Road. This project is considered a big win for the North Texas region and would balance the need to move vehicles efficiently and safely while also promoting walkability, integrating resiliency, improving ecosystem health, and spurring economic development.

MICHAEL MORRIS, DIRECTOR OF TRANSPORTATION, NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS

SHARED VISION. SHARED GOALS.





LET'S TRANSFORM DALLAS TOGETHER.

S W M D

TRANS
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The Mission of the Texas Trees Foundation is to preserve, beautify and expand parks and other public natural green spaces, and to beautify our 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.

texas trees.org/swmdtransformation

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For campaign details, please contact Janette Monear at janette@texas trees.org or heather@rise360consulting.com

For project information, please visit our website at <http://www.texas trees.org/swmdtransformation> or contact lannie@texas trees.org