
SOUTHWESTERN MEDICAL DISTRICT



People Mover Planning Luncheon

North Central Texas Council of Governments

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Robert Prejean, AICP, Manager

Presentation

- Southwestern Medical District
- Intra-District Connector –
Phase One Study
 - Existing Conditions
 - General Design Guidelines
 - Preferred Alignment & Stations
 - Stations
 - Design Parameters
 - Guideway Aesthetics
 - System Benefits
 - Costs

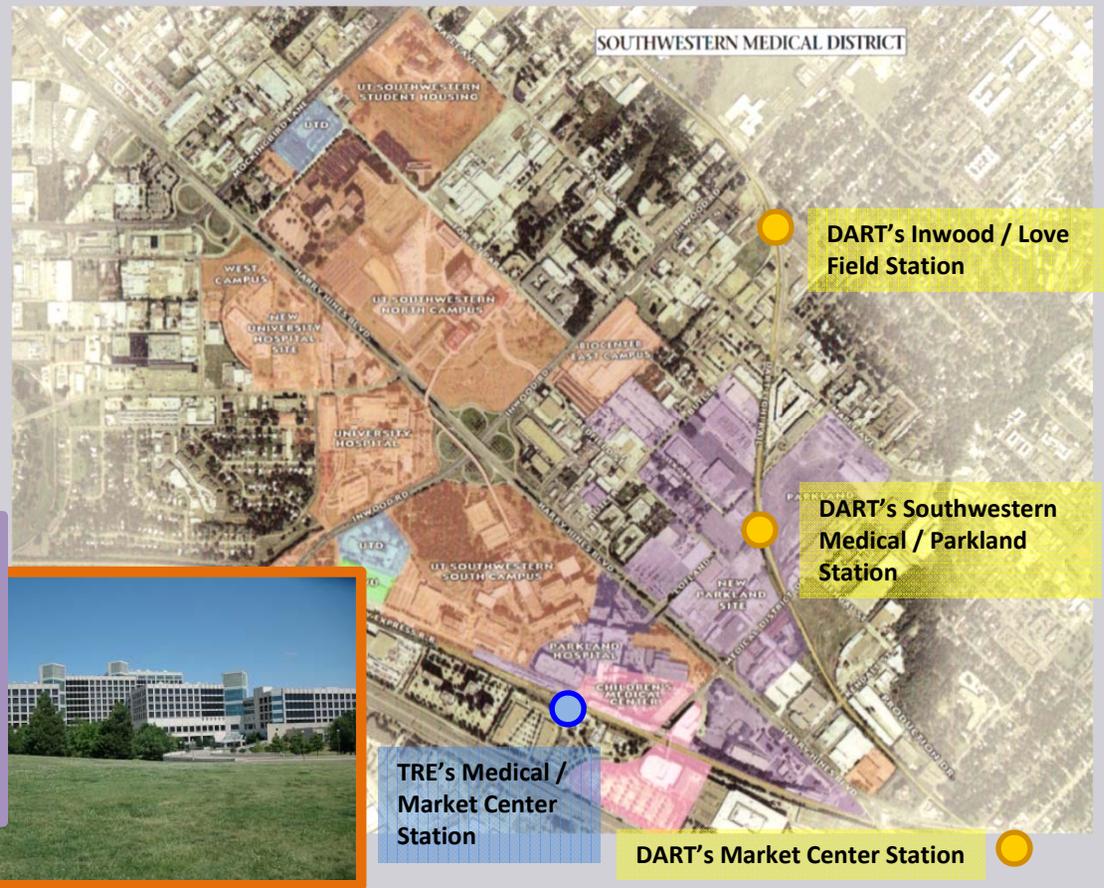


Southwestern Medical District

- Background about the Southwestern Medical District

Three medical institutions:

- *Children's Medical Center Dallas*
- *Parkland Hospital*
- *UT Southwestern Medical Center*



Southwestern Medical District

- Background about the Southwestern Medical District
 - 501(c)(3) corporation organized exclusively for the benefit of, to perform the functions of, or to carry out the purposes of the three public charity members
 - Nine members on District's Board of Directors
 - Six working groups
 - Manager is sole employee

In 2012

- More than 28,300 employees
- Over 2.3 million visits to clinics and ER's
- Approximately 73,200 patients admitted

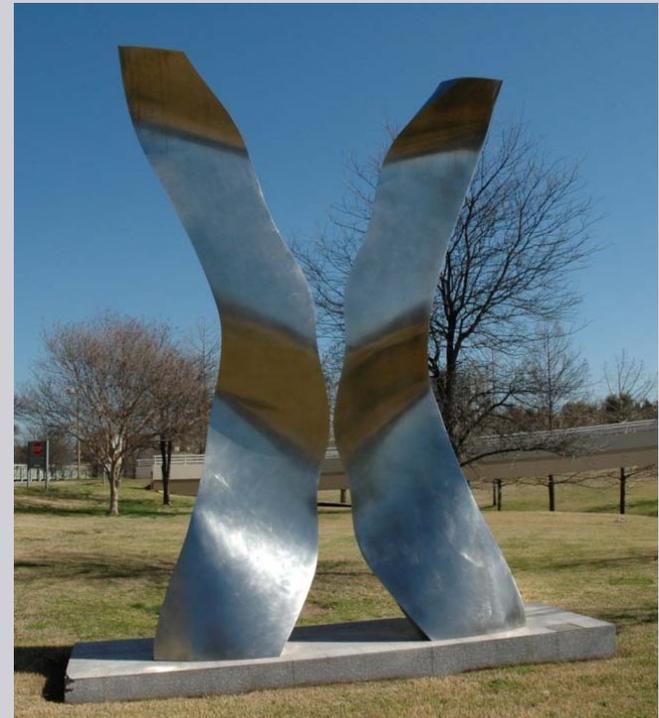
Dallas-Fort Worth's Population

2013 estimates – 6.8 million people*

2030 forecast – 11.3 million people**

* Source: U.S. Bureau of Census (March 2014) ; North Texas Commission website

** Source: Texas State Data Center Projections - 2000-2007 Migration (Jan. 2012), North Texas Commission website



"Undulating X" by Ali Baudoin, 1984

Southwestern Medical District

Accomplishments

- 2002-2010 DART Green Line alignment and stations
- 2007 Change name of Motor Street to Medical District Drive
- 2004-2012 Widen Medical District Drive from Maple Avenue
Southwestern Medical Avenue
- 2009 Consolidated University Medical Park into corporate
structure of the Southwestern Medical District
- 2009 Southwestern Medical District Master Plan
- 2009 Developed shared shuttle routes within SWMD
- 2010 Southwestern Medical District Transportation Plan
- 2010 Involvement in City of Dallas Stemmons Corridor-
Southwestern Medical District Area Plan
- 2011 District substation feasibility study
- 2012 District needs inventory for City of Dallas 2012 Bond Program
- Wayfinding signage and City of Dallas sign district ordinance
- Medical District Drive expansion (Dallas County lead agency)



Southwestern Medical District

- Post World War II decades of Dallas
 - Beautification of Harry Hines Boulevard
 - Age of the automobile
 - Area provided room to grow
 - Desirable area for growth



18-C**** Thursday, June 11, 1959 — DALLAS TIMES HERALD



HARRY HINES CLOVERLEAF PACKS 'EM IN

The new cloverleaf traffic interchange designed to ease the long-standing traffic congestion problem at Harry Hines Blvd. and Inwood Rd. begins to take shape under the relentless blades of bulldozers. And for the time being at least, it's adding its own traffic

wow. This view shows Hines looking northward with Inwood-Hampton to the left and right. Traffic is being routed around the project, where the underpass is being constructed. Target date for completion is prior to Jan. 1.—Aerial Photo by Squire Hawkins.

Inviting Approaches
An splendid new highway entrance into Dallas near completion under the program being carried out by the State Highway Department and the city and county of Dallas, the sportsman's movement among citizens to preserve the natural beauty of the roadides becomes one of the most important local activities.

Mrs. Jerry Shively, chairman of the city district committee for roadside improvement, appeared by letter to all benefiting property owners adjacent to these new highway approaches to act—and to act now—to prevent billboards or unsightly structures from mushrooming along these routes. City Plan Engineer E. A. Yarnall adds his voice and counsel to the same appeal. Other civic leaders are bestirring themselves in this protective measure.

The imminent opening of Harry Hines Boulevard, locally known as the Northwest Connection Five Points north of Love Field to the business district, focuses attention on beautification plans for this all-important thoroughfare. Three cardinal highways—Forthwest Highway from Wichita Falls and Oklahoma City, Gidnessville and Denwood Highway from Wichita Falls, and the new one in construction between Dallas and Fort Worth, the superb, four-lane, separated freeway to Pflug Points southward.

Property owners along Hines Boulevard are being urged to profit immeasurably if this beautiful boulevard is made a gateway for motorists and visitors to the area by planting trees and structures to make the value of their land will be depressed 50 per cent of the present.

Harry Hines project begins
Plans call for 150 trees in median near medical complex

By Stephanie Ward
Dignitaries broke ground Thursday for a \$250,000 landscaping project to beautify Harry Hines Boulevard.

Officials from the University of Texas at Dallas, a coalition of 15 institutions and businesses in the Southwest Medical Center, said that Harry Hines is a gateway for motorists and visitors to the area and that little has been done to improve it.

"At the moment, people who come here are greeted by Harry Hines Boulevard, and it's not very attractive," Dr. Kern Wildenthal, president of UT Southwestern, said during a news conference at Zale.

The project stems from a study initiated by the Shermann Durrant & Bushman Association which looked at "natural" and man-made landscaping on Harry Hines and recommended improvements.

"We have a model program for greening and humanizing the urban landscape in an area of major importance to Dallas," said Gerry Ousley, president of University Medical Park.

About 250,000 of the money for the project came from a matching grant from the state highway department.

"This project represents an important leg of the department's job," said Mark Matthews, landscape architect for the department. "By increasing the aesthetic value of the landscape, you help to increase traffic, and that helps the economic stability of the area."

University Medical Park will contribute annually for maintenance of the landscaping.

Participating in the groundbreaking for Harry Hines landscaping project are (from left) Gerry Ousley, president of University Medical Park Inc., Karen Overstreet of Children's Medical Center, Dr. Kern Wildenthal, president of UT Southwestern, Mark Ball of the state highway commission, Mark Matthews, landscape architect with the state highway department, and Brittany Mingo and Humberto Sarda of Texas Scottish Rite Hospital.

The Dallas Morning News photo by Michael Patrick.

Street
D.M.N. 11-16-58

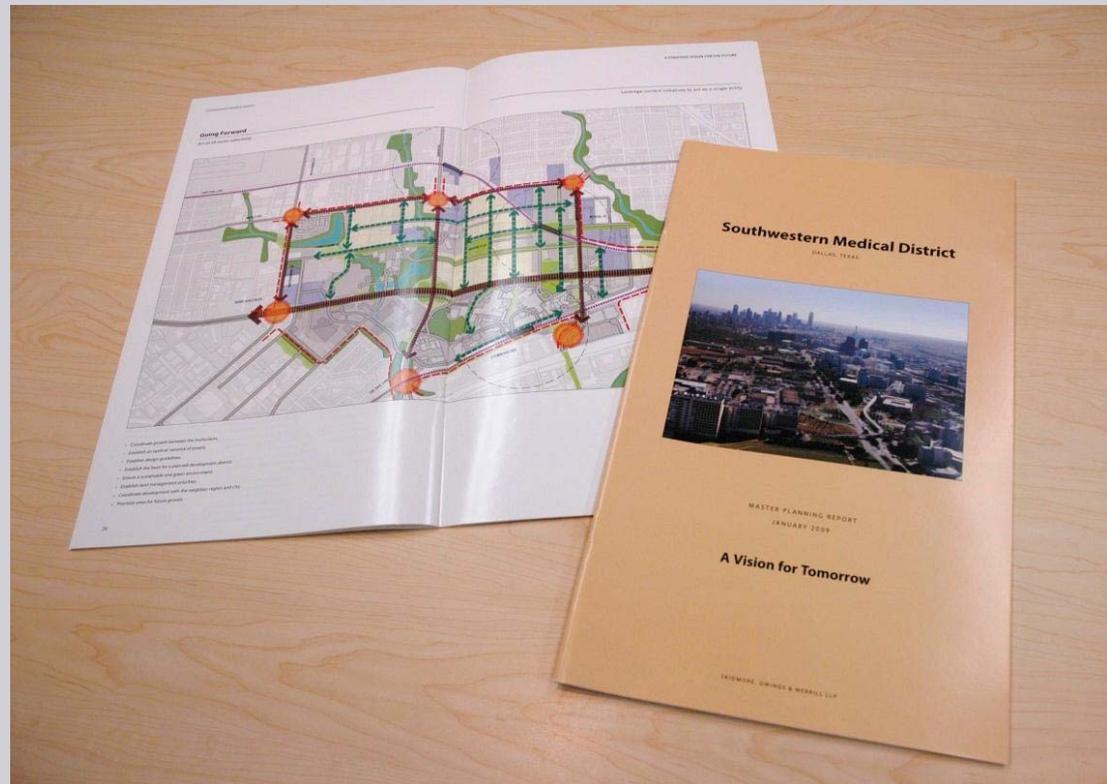
Southwestern Medical District

- Transitioning into the 21st century
 - Developed for autos and 18-wheelers, not people
 - Major thoroughfares and superblocks
 - Aging and obsolete industrial buildings
 - 'Worse for wear' commercial corridors
 - Harry Hines Boulevard questionable reputation
 - Running out of room
 - Not meeting the needs of today's market



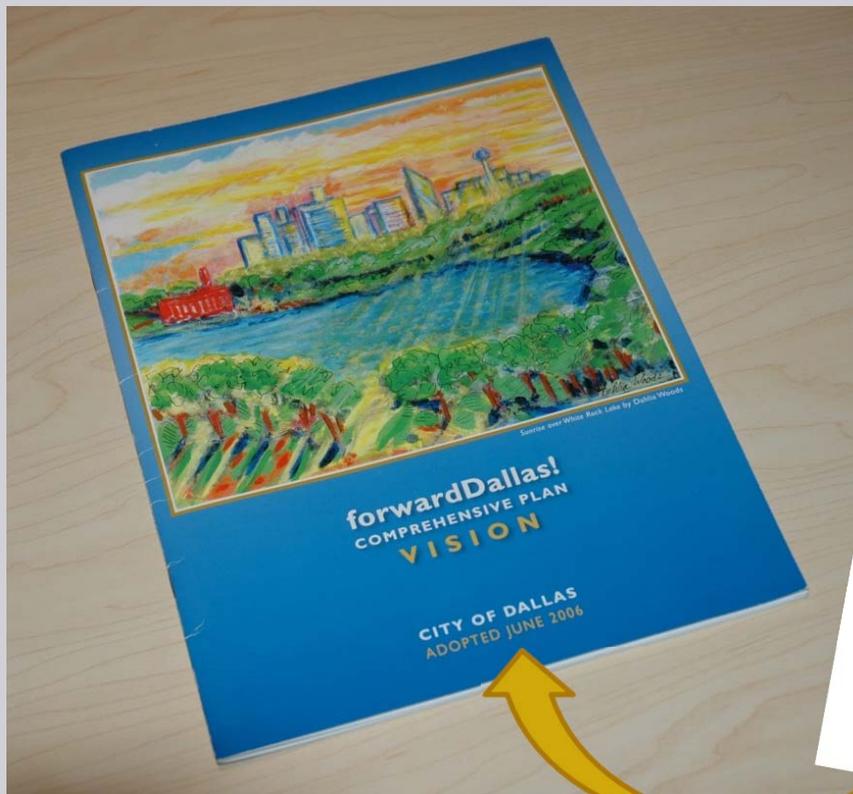
Southwestern Medical District

- Southwestern Medical District Master Plan
 - *Southwestern Medical District: A Vision for Tomorrow*
 - Developed by Skidmore Owings & Merrill
 - Completed January 2009
 - Three sections, including
 - The Region,
 - The District, and
 - Strategies



Southwestern Medical District

- Local comprehensive plans
 - City of Dallas' forwardDallas! Comprehensive Plan
 - Stemmons Corridor – Southwestern Medical District Area Plan (June 2010)



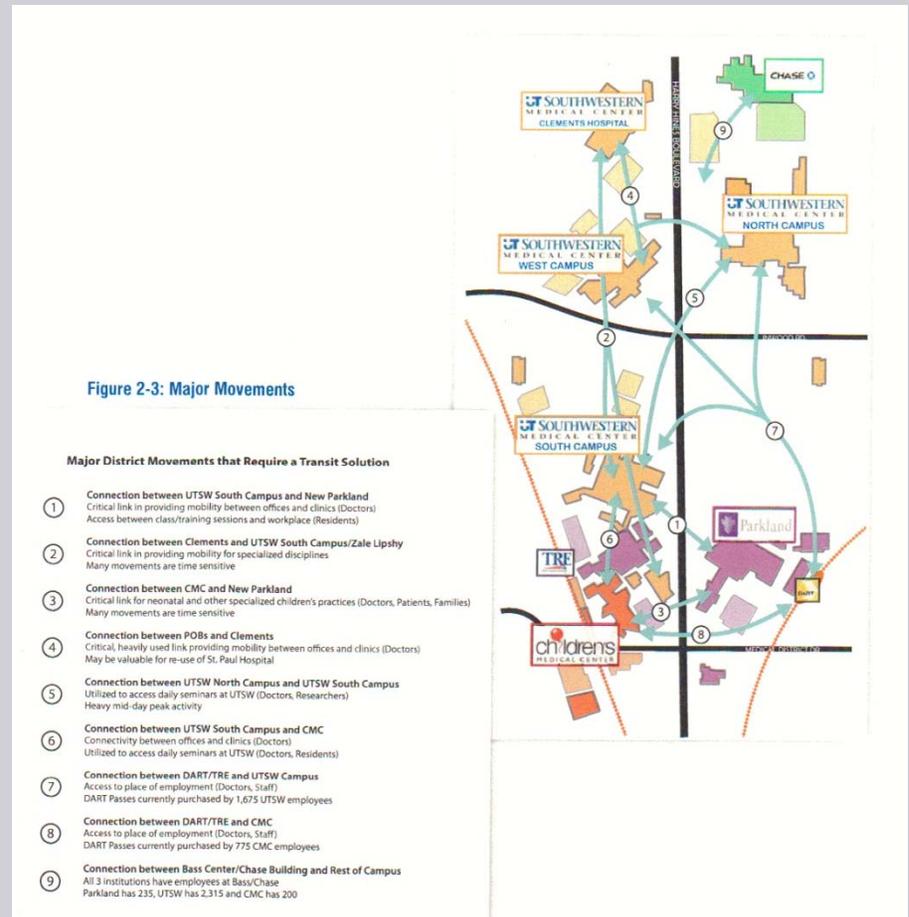
Intra-District Connector – Phase One Study

- Project Background
 - April 2011, Kimley-Horn and Associates (KHA) conducts a feasibility study of transit alternatives
 - June 2011, KHA recommends to SWMD Board an elevated guideway
 - September 2011, KHA suggests approach to begin implementation to SWMD Board; Board directs KHA to focus on:
 - Developing the project purpose and need, and
 - The initial elements of conceptual engineering
 - January 2012 kick-off meeting
 - Technical advisory committee and small working group
 - Stakeholder interviews with district's three institutions
 - Data gathering
 - Develop project goals
 - Design workshop
 - Develop initial transit concepts
 - Implementation plan



Intra-District Connector – Phase One Study

- Existing Conditions
 - Data sources
 - Study Area locations and boundaries
 - Land use changes
 - Travel patterns
 - District-wide
 - Key movements of employees
 - UTSW South Campus ↔ Parkland Memorial Hospital/CMC
 - Parkland Memorial Hospital ↔ CMC
 - UTSW South Campus ↔ UTSW North Campus
 - Clements ↔ Zale Lipshy
 - Bass Center
 - DART/TRE
 - Key challenges
 - Crossing Harry Hines Boulevard
 - Distance between buildings
 - Inefficient shuttle network



Intra-District Connector – Phase One Study

- General Design Guidelines

As the SWMD continues to grow beyond the capacity of the local road network, there is a need to create a safe, efficient, flexible and easy-to-use transportation circulator that integrates the multiple facilities within the medical district while primarily serving the needs of the faculty and staff that work in, or serve the district.

Four project goals:

Goal 1 – The system must meet the needs of the faculty/physicians and staff

Goal 2 – The system has to be safe and secure for the intended users

Goal 3 – The system has to be efficient and flexible in terms of operations

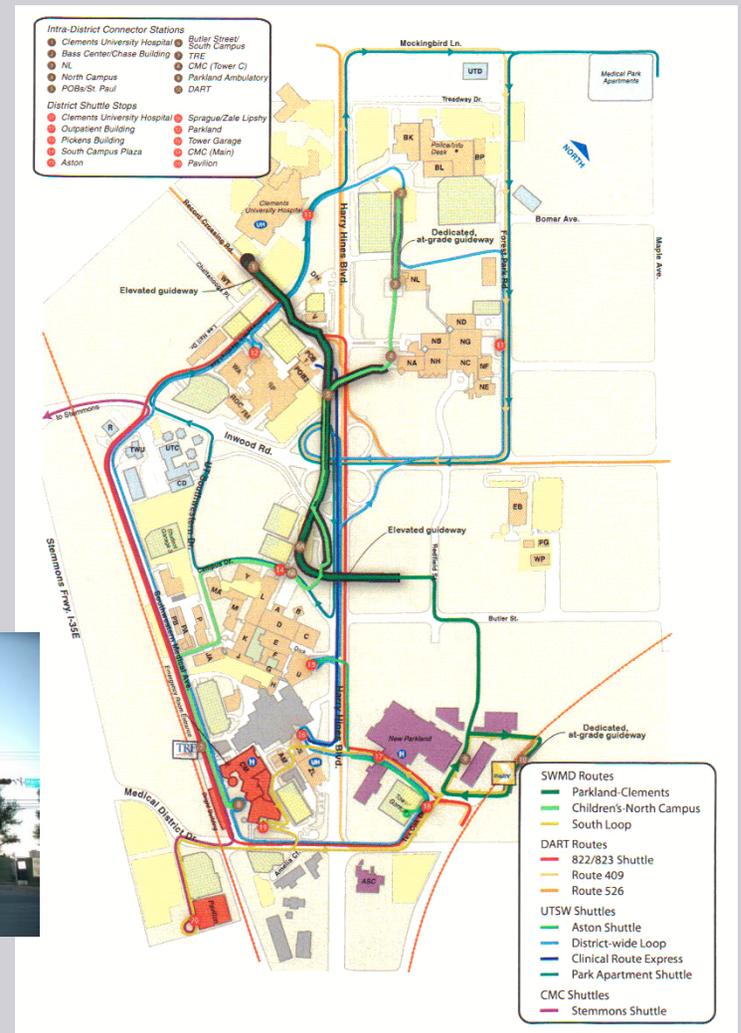
Goal 4 – The system should allow for future expansions or changes in service or vehicle types as the district grows or policies change regarding campus land use plans

Also identified were certain parameters to guide the general design of guideways and stations

Intra-District Connector – Phase One Study

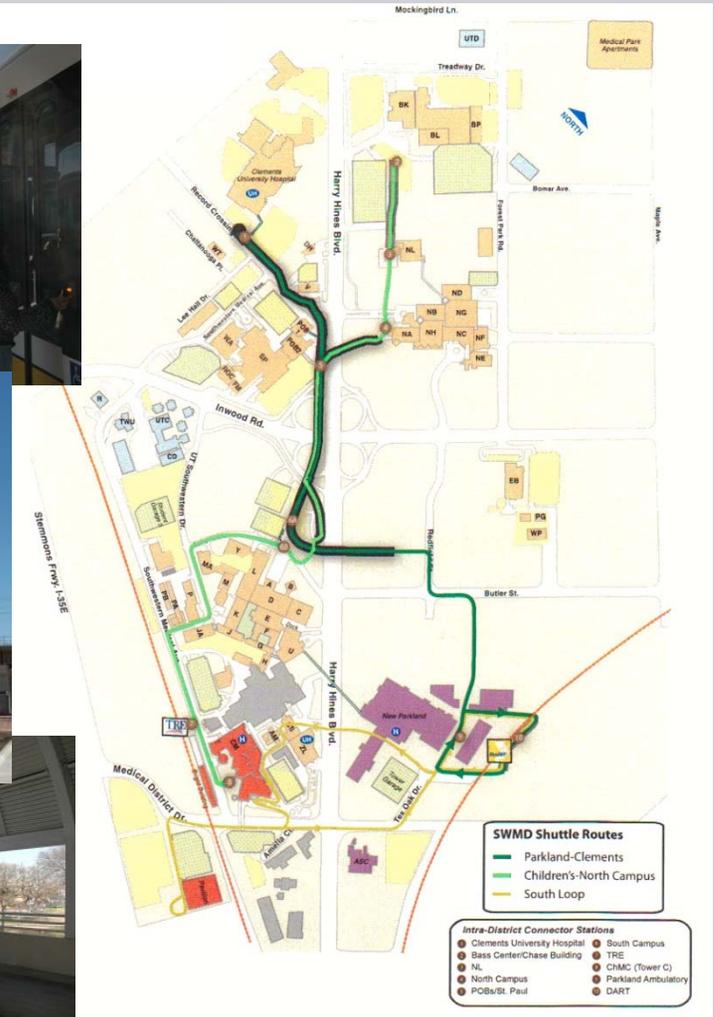
- Preferred Alignment & Stations

- Phase 1 infrastructure
- Buildout alignments
 - Four buildout alternatives
- Overall transit system
 - Existing shuttle service
 - Proposed transit system
- Operating schedule
- Security and operations management
 - Security
 - Vehicle storage
 - Communications



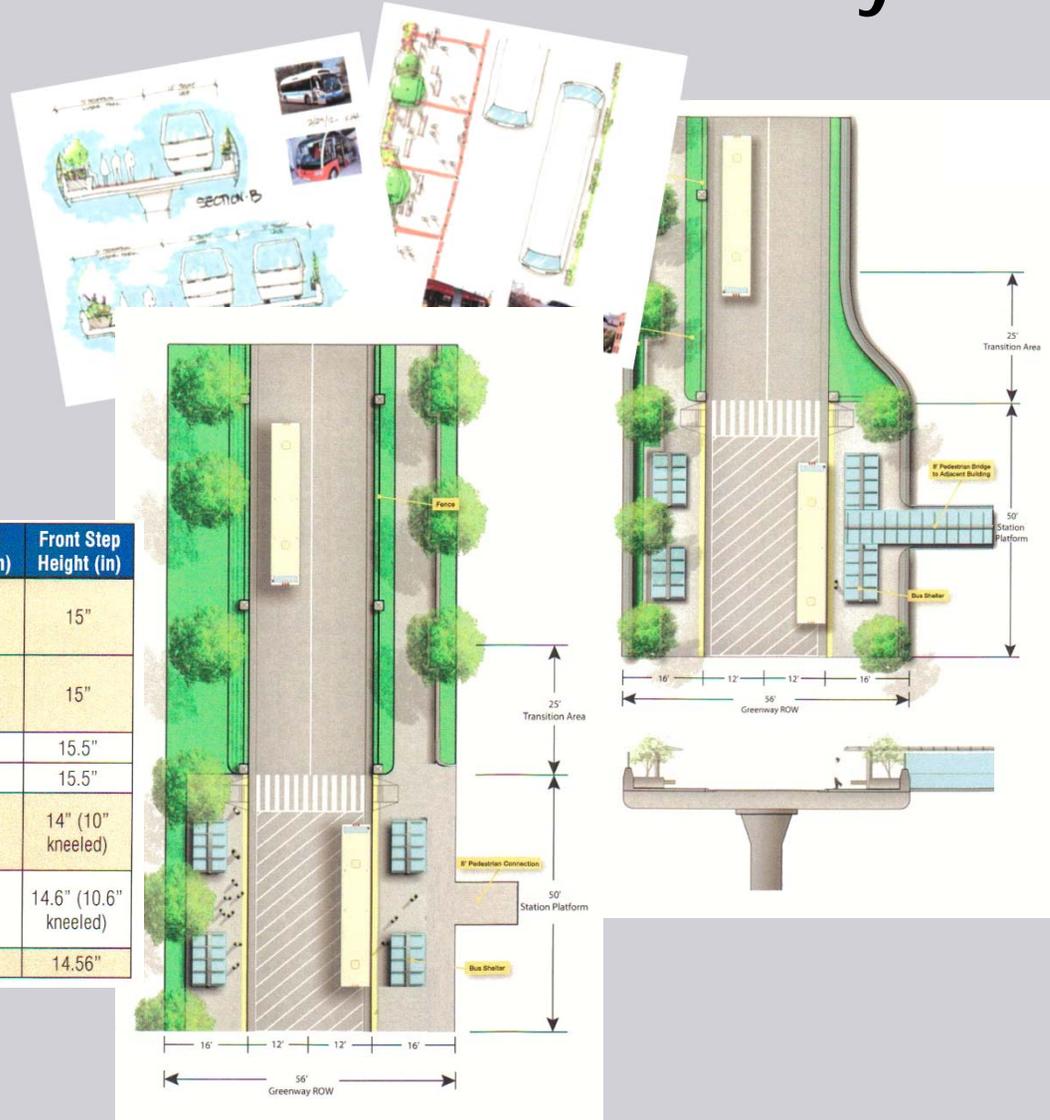
Intra-District Connector – Phase One Study

- Stations
 - Connectivity
 - Spacing
 - Activity centers
 - Transit access
 - Impacts
 - Station connectivity



Intra-District Connector – Phase One Study

- Design Parameters
 - Guideway design requirements
 - Station design requirements
 - Emergency access
 - Bus procurement



| | | Seating Max | Length (ft) | Turning Radius (ft) | Overall Height (in) | Overall Width (in) | Front Step Height (in) |
|--------------------|---------|-------------|-------------|---------------------|------------------------------------|--------------------|------------------------|
| Gillig | 29' Bus | 28 | 30' | 29' | 115"-132" (depending on type) | 102" | 15" |
| | 35' Bus | 32 | 36' | 36' | 116"-132" (depending on type) | 102" | 15" |
| NABI LFW | 31-LFW | 25 | 32' - 7" | 32' - 8" | 133" | 102" | 15.5" |
| | 35-LFW | 30 | 36' | 33' - 8" | 133" | 102" | 15.5" |
| New Flyer Xcelsior | 35' | 34 | 36' - 3" | 39' | 126" - 133" (depending on type) | 102" | 14" (10" kneeled) |
| Nova LFS | 40' | 41 | 40' | 40' - 10" | 124"-128" (depending on type) | 102" | 14.6" (10.6" kneeled) |
| Vanhool | A300L | 33 | 39' - 10" | 41' - 2" | 131" | 102" | 14.56" |

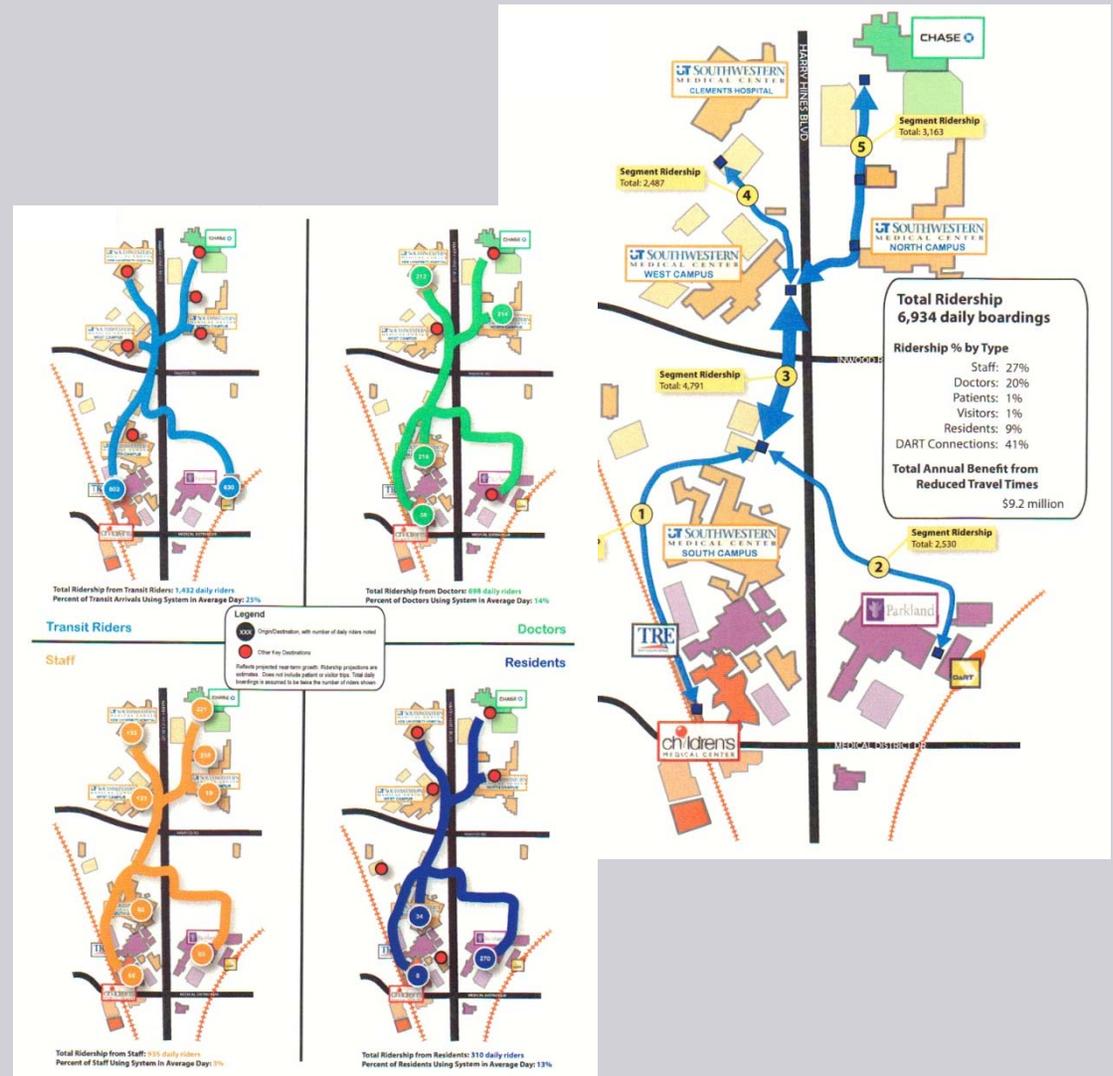
Intra-District Connector – Phase One Study

- Guideway Aesthetics
 - Safe, efficient, and aesthetically pleasing pedestrian environment
 - Landscape linear park-like environment
 - A two-lane transit guideway designed for rubber-tired transit vehicles, but could be converted into a fixed-guideway system
 - A series of stations providing easy access to clinics, hospitals, and facilities
 - Flexibility in design as the District expands and evolves



Intra-District Connector – Phase One Study

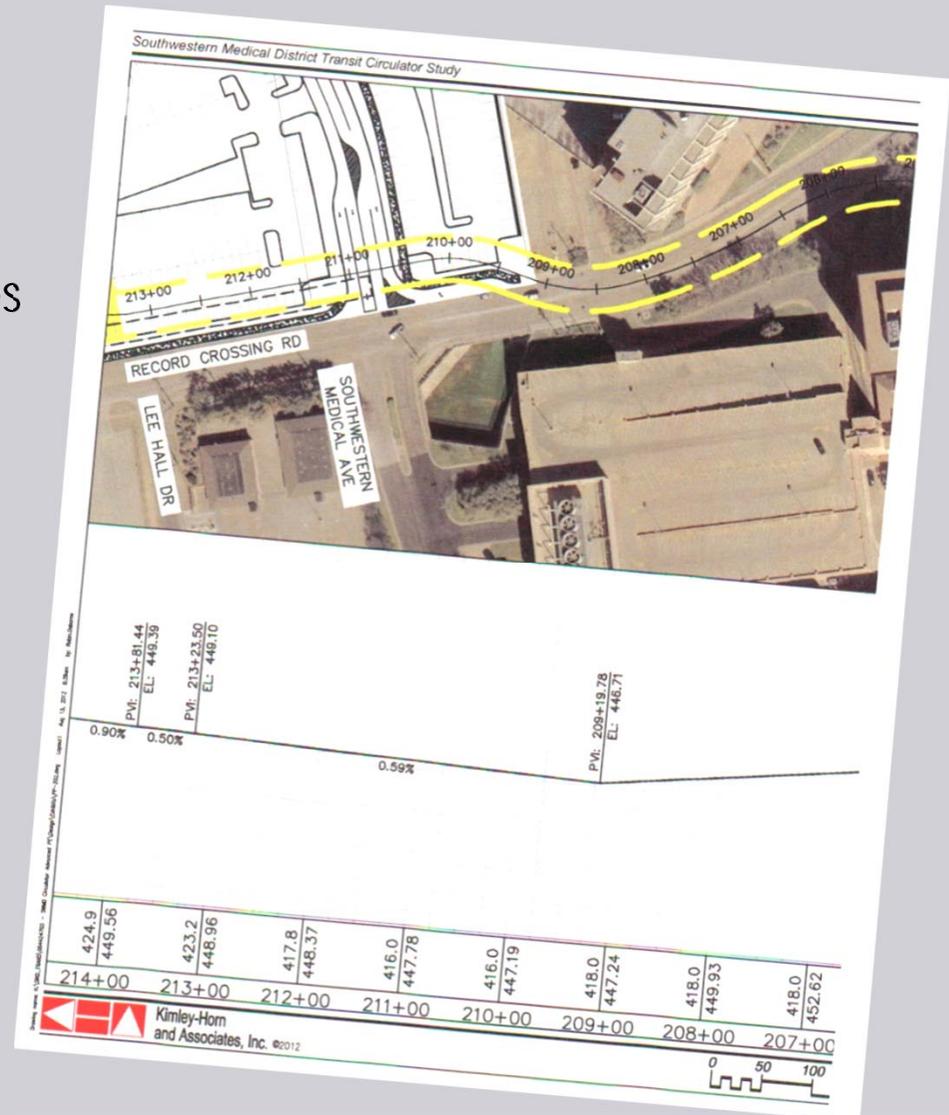
- System Benefits
 - System user groups
 - Doctors
 - Staff/Transit riders
 - Residents
 - Ridership calculations
 - Limitations of data
 - Projected ridership
 - Ridership by segment
 - Ridership by user groups
 - Travel time benefits
 - Travel time savings
 - Calculation of travel time benefits
 - Other system benefits
 - Unification of the District entities
 - District wayfinding
 - Parking



Intra-District Connector – Phase One Study

- Costs
 - Unit costs
 - Phase 1 capital costs
 - Capital costs for buildout alternatives
 - Operating costs
 - Financial analysis and return on investment

- Phasing and schedule



Thank you!

Robert Prejean, AICP
Manager
Southwestern Medical District
robert.prejean@swmeddistrict.org
214.456.0897

www.swmeddistrict.org