Trinity Parkway Technical Team Proposal
(Conceptual Development of the Design Charrette Report)

Transportation and Trinity River Project Committee
March 21, 2016
Introduction

City Council Direction:

The City Manager was directed by Council Resolution 150732 to form a team, including partners and appropriate expertise from a variety of disciplines, to determine actions that would be necessary to implement the findings of the Charrette Report within the current project federal approvals or Records of Decision (ROD).

The Purpose of This Report or Technical Proposal:

To serve as a summary of findings by the Trinity Parkway Technical Team regarding:

• Evaluation of the ideas within the Trinity Parkway Design Charrette Report
• How those ideas may be implemented within the context of current federal regulatory approvals
Technical Review

• Local, regional and private partners and the City of Dallas funded a Technical Team of consultants and provided in-kind support through staff and resources.
  • This Technical Team included national and local expertise, as well as staff from the local, state and federal project partner agencies.
  • Several members of the Design Charrette Team also actively participated in Technical Team work sessions.

• The Technical Team has been working throughout the fall of 2015 and winter of 2016 to bring forward its assessment of feasibility regarding the ideas presented.
  • The Technical Team proceeded with interactive design investigations and development of detailed conceptual designs from hand-drawn ideas in the Charrette Report.
  • They focused their work on the ideas recommended in the Charrette Report and then assessed their potential consistency with the existing ROD.
Design Charrette Team

• Larry Beasley – Planner/Urban Designer, Chairman*
• Brent Brown – Urban Planning & Design*
• Alex Krieger – Architect/Urban Designer*
• Jeff Tumlin – Transportation Planner*
• Zabe Bent – Transportation Planner*
• Ignacio Bunster-Ossa – Landscape Architect/Urban Designer
• Timothy Dekker – Hydrology Specialist*
• Elizabeth Macdonald – Urban Designer
• Allan Jacobs – Planner/Urban Designer
• Elissa Hoagland Izmailyan – Economic Development Specialist*
• John Alschuler – Economic Development Specialist*
• Alan Mountjoy – Architect/Urban Designer*
• Mark Simmons – Landscape Architect/Ecology Specialist

* Also participated in Technical Team work sessions
Technical Team

Larry Beasley, Co-Facilitator
Brent Brown, Co-Facilitator

• bcWORKSHOP – Urban Planning and Design
• City of Dallas Staff – Multiple Technical Disciplines
• Larry Good – Urban Planning/Design and Economic Development
• Gresham, Smith and Partners – Stormwater Management and Design
• Keith Manoy – Transportation Planning
• Halff Associates – Transportation Planning/Road Design
• HNTB Corporation – Geotechnical and Levee Integrity
• Salcedo Group – Civil Engineering
• Michael Van Valkenburgh Associates – Environmental Design and Landscape Architecture
Local, state and federal project partners:

- City of Dallas
- North Texas Tollway Authority (NTTA)
- North Central Texas Council of Governments (NCTCOG)
- Texas Department of Transportation (TxDOT)
- Federal Highway Administration (FHWA)
- United States Army Corps of Engineers (Corps)
Public Forums

During the months of May and June, 2015, several local public forums were conducted around the city to gather input on the 20 ideas featured in the Charrette Report.

Citizens and others were also afforded an opportunity to provide public input via an open online opportunity.

Several hundred comments were received. This input was shared with the Technical Team and later with Trinity Parkway Advisory Committee (“Advisory Committee”) members.
Summary of Findings

• The Technical Team’s conceptual design proposal (Technical Proposal) significantly performs or is largely consistent with the Charrette Report in the Technical Proposal as follows.

• Of the 20 key features of the charrette scheme:
  • Nine (9) are clearly consistent.
  • Three (3) offer only minor variations that are not incompatible.
  • One (1) offers potential significant variation and requires Council choices.
  • Three (3) are policy decisions, not matters of technical design, and the detailed design accommodates them.
  • Four (4) are still subject to more detailed design which normally will not happen until later in the process and therefore cannot now be fully judged, though nothing incompatible is anticipated.
  • In addition, other matters have emerged through the technical design process that will require Council consideration as discussed herein.
Technical Team Findings
Confirmation #1

Roadway and land bench elevations, roadway corridor and end connection to highways generally as earlier proposed.

Technical Team Findings: The Technical Proposal reviewed these confirmations for conformity with Design Charrette Team drawings and determined that they are consistent with the ROD.
Confirmations #2, #3 & #4

Pedestrian links across the Parkway generally as earlier proposed – 15 links under and over the Parkway at about ¼-mile intervals; Top-of-levee bikeways and pedestrian paths generally as earlier proposed; Service roads/bikeways/pedestrian paths around the Parkway generally as earlier proposed.

Technical Team Findings: The Technical Proposal reviewed these confirmations for conformity with Design Charrette Team drawings and determined that they are consistent with the ROD.
Variation #1

Only build a 4 lane roadway now – fit those 4 lanes of traffic (narrower lanes + grass shoulders) meandering within the approved road corridor.

Technical Team Findings: The Technical Proposal is generally consistent with the Design Charrette Team vision and several elements further reinforce that vision. Regarding the ROD, the Technical Team understood that design exceptions would be required from the approved scheme and these would be suggested as part of a staged approach. Lane widths were meant to be those of a standard arterial roadway. This is likely acceptable for a first phase as a meander within existing road alignment. Reduced lane width and minimized shoulders may require design exceptions.
Variation #2

Build fewer ramps. Only build two set of ramps within the park accessing the inner city for the foreseeable future: 1 on/off pair at the north end near the Medical District and 1 on/off pair at the south end near Cedar Crest.

Technical Team Findings: The Technical Proposal, even with its variations, generally meets the intent of the Design Charrette Team vision, provided that one intrusive ramp at Riverfront is relocated if shifted from Cedar Crest. Vehicle Miles Traveled ("VMT") projections were generated for each proposed intersection in the ROD, as well as the recommended interchanges by the Design Charrette Team. Design exceptions would likely be required from the approved design for fewer ramps, and to shift and reconfigure ramps. The initial two sets of ramps or interchanges are recommended as part of a first phase.
Variation #3 & #4
Ban trucks except for emergencies; Add a U-turn option within the Parkway corridor at mid-point.

Technical Team Findings: There is nothing in the Technical Proposal that would forestall adoption of a policy to ban trucks, but this decision will require further assessment with project partners to determine potential financial implications. Regarding U-turns, Corps guidance would be required from the approved scheme and these would be included as part of a phased approach.
Variation #5

Allow on-street parking along the Parkway on weekend slow periods and special occasions.

Technical Team Findings: There is nothing in the Technical Proposal that would forestall adoption of this policy decision, as the outside lane has been designed to be slightly wider than minimal standards to accommodate extra width needed for occasional parking. This will require a decision among project partners related to operation of the roadway, with the need to address potential financial implications and liability/safety concerns.
Design Refinement #1

Meander the Parkway within the approved road corridor so that future road sections can be finished now as pull-off parking areas on both sides of the Parkway – for park access and scenic overlook.

Technical Team Findings: Design exceptions may be required from the approved scheme to achieve the pull-offs and parking for park access. These would be suggested as integral to the staged or phased approach because these pull-off/parking paved areas are all located within areas that may ultimately be paved as part of a full build out as currently approved in 3C.
Design Refinement #2

Design refinement of the landscape configuration to add a consistent linear tree pattern at about 20’ – 40’-centers along the Parkway – making it a “Tree-Lined Parkway” for character and beauty.

Technical Team Findings: The Technical Proposal is generally consistent with the Design Charrette Team vision to achieve the experience of a roadway lined with trees. This potential configuration of a tree-lined Parkway remains contingent upon the 65%-level landscape design development when the full detailed landscape plan is further refined. This will include additional hydrologic review that is consistent with the Corps’ technical parameters.
Design Refinement #3

Design refinement of the landscape configuration to add character, interest, and a strong ecological strategy all along the Parkway, especially along the land bench edges and at stream outfall areas.

Technical Team Findings: It appears that an acceptable landscape concept is possible within the current technical design. A more detailed landscape design would include further hydrologic review that is consistent with the Corps’ technical requirements.
Design Refinement #4

Design refinement of flood protection barriers with landscape, art, wall treatments and hillocks or berms to eliminate blank walls and secure more pervasive views of the park and to add character, interest, and a strong ecological strategy all along the Parkway.
Technical Team Findings: Design exceptions will be required from the approved scheme to achieve berming on the Parkway side for the 100-year flood standard. Further detailing of this concept with landscape elements may be pursued during the 65%-level landscape design development. Resolution of berming on the park side of the wall cannot be determined until the full park review is undertaken because more solutions may be necessary to meet Corps hydrologic requirements. Pursuing a flood standard of less than the 100-year protection will almost certainly challenge the ROD, representing a high risk in moving the project forward. The Technical Team’s recommendation is to uphold the use of the 100-year flood standard for the Parkway.
Design Refinement #5

Design refinement to exploit five major “WOW” views over the Parkway.

Technical Team Findings: This idea is consistent with the ROD, although design exceptions may be required to achieve pull-off parking areas as part of a phased or staged approach.
Design Refinements #6 & #7

Allow toll free park use from the Parkway; Locate transit stops so as to enhance transit-user access to the park over the Parkway – for example, provide a Houston Bridge streetcar stop and a Riverfront Boulevard bus stop.

Technical Team Findings: There is nothing in the Technical Proposal that would forestall adoption of this policy decision to allow toll free use of the park. This will require a policy decision among project partners related to operation of the roadway, with the need to confirm financial implications. With regard to transit user access, this opportunity is not ruled out by the current Technical Proposal. This should be resolved with further design.
Development Strategy #1

For the ‘Reunion/Commerce’ and ‘Mix Master District’, catalyze development to happen earlier than expected by allowing development to locate as close to the park as possible.

Technical Team Findings: The Technical Proposal confirms the Design Charrette Team vision for this development strategy. This will be further explored as part of the park review process now underway.
Development Strategy #2

For the ‘Design District’, facilitate the current incremental development trend with regular and attractive pedestrian connections across the Parkway to the park.

Technical Team Findings: The Technical Proposal confirms the Design Charrette Team vision for this development strategy. This will be further explored as part of the park review process now underway.
Development Strategy #3

For the ‘Southside District’, facilitate the current development inclinations by enhancing the “sump” water bodies as the primary amenities – in this district the park and Parkway are less important.

Technical Team Findings: The Technical Proposal confirms the Design Charrette Team vision for this development strategy. This will be further explored as part of the park review process now underway.
Development Strategy #4

For the districts at the far north and south ends of the Parkway, just before it joins the existing highways, build under or over the roadway elevation within the alignment so that the Parkway development spurs private development that augments the neighborhoods.

Technical Team Findings: The Technical Proposal confirms the Design Charrette Team vision for this development strategy. This will be further explored as part of the park review process now underway.

Idea #20
Additional Consideration #1

No design speed specified in Charrette Report – resulting design speed in Technical Proposal is 45 MPH.

Technical Team Findings: Evaluation suggests that the 45 MPH effective design speed, with the 4-lane cross-section, will cut the vehicle miles traveled in the regional model by about 40% from the ROD maximum estimate – however it still accommodates the projected demand in the near term as part of a phased plan.

Also, a lower speed would reduce the number of vehicles using the roadway, which would reduce toll revenue. This would have a financial implication on project funding and would need to be considered in developing the project financing plan with project partners. Posted speed may be established by agreement with NTTA.

Finally, TxDOT/FHWA will examine the ability of the Parkway to meet ROD “need and purpose” as a reliever route given ultimate build-out of all phases currently approved.
**Additional Consideration #2**

*Parkway and Levee Alignment*

**Technical Team Findings:** In the interest of avoiding some costs and achieving less impact on the Forest, the Technical Team discussed the potential to share right of way along the future Lamar Levee. However, sharing right of way between two federal agencies (FHWA and the Corps) is not preferred and would require waivers to federal policies regarding primacy of the infrastructure. These approvals would be through the headquarters levels and are not likely to be approved, and therefore not recommended by the team. Additionally, this segment represents a fairly small portion of the Parkway and cost reductions and avoidance of the Forest would likely be nominal given construction requirements related to alignment with the future levee.
Additional Consideration #3

*Economic Development of IH-35/SH-183 Connections.*

**Technical Team Findings:** This consideration is in addition to the economic development concepts proposed as a part of the Design Charrette, but may present an opportunity to expand economic development along the corridor.

Further preliminary exploration of this additional consideration may be performed internally by City staff.
Additional Consideration #4

*Bridge Deck Treatment over Outfalls.*

**Technical Team Findings:** Bridge treatment concepts can be explored as part of the design development process, but may increase overall project costs for these facilities, both for initial implementation and ongoing operations and maintenance.
Conclusions and Recommendations

• Using informed expertise based upon professional experience, the Technical Team held firmly to the principles of bringing the Charrette to a more detailed level of conceptual design to better assess the compatibility of the proposal with current federal approvals.

• While compatibility with existing federal approvals has been tested via dialogue with local, state, and federal partners, official federal approvals have not been sought due to the need to advance the detailed conceptual designs further to accommodate formal consideration.
Recommended Next Steps

• The Parkway needs to be advanced to a detailed schematic of the current Technical Proposal and the landscape design needs to be advanced up to 65% to provide a deliverable to partner agencies for interim design schematic review and hydraulic coordination for determination of compatibility with current federal approvals.

• This work could be completed through the existing contracts with current authority but will require funding from the project partners. Very preliminary cost estimates range from $2-3 million to take design to this stage. This work may take 12-15 months, assuming federal partners are able to complete expeditious reviews.

• Should the City Council desire to move forward with detailed schematic design and 65% design of landscape components, the project partners will formalize deliverables and schedules, and then submit deliverables for formal approval from federal/state partners.
Summary of Specific Recommendations

1. Develop necessary documentation to allow design exception to implement U-Turns, meandering and pull-off parking as a part of a staged approach to Parkway implementation.

2. Complete analysis and develop recommendations for shifting the ramps and reconfiguring Riverfront ramps.

3. Explore appropriate policy concerning operation of the roadway with respect to restricting non-emergency truck traffic, allowing occasional on-street parking and accommodating toll-free use of the park.

4. Continue design exploration of the tree-lined Parkway concept and the landscape configuration to add character, interest and strong ecological strategy along parkway.

5. Continue exploration of aesthetic design refinements of the flood protection barriers and bridge deck crossings over outfalls.

6. Continue design and transit agency coordination as necessary concerning possible transit stop locations and/or access.
Summary of Specific Recommendations

7. Continue exploration of **development strategies** near Reunion, Commerce, Design District, and Mix-Master District as part of design and Park review process.

8. Continue exploration of **sump options** and **ramp design** in and near Southside District to support and enhance adjacent development opportunity.

9. Continue design exploration for strategies to **build over/under the roadway** at the far north/south ends of the Parkway to spur private development and enhance neighborhoods.

10. Explore how the use of a **lower design speed as a part of a staged implementation** will impact existing ROD.

11. Further investigate **economic development considerations in areas near the IH-35/SH-183 corridor**.

12. Investigate the **IH-35/SH-183 connection** to the Parkway scaled as appropriate as a Phase 1 Parkway using traffic modeling provided by North Texas Council of Governments (NCTCOG).

13. Investigate **future connections, amenities and access for adjacent neighborhoods** as part of the park planning efforts.
Overview of Detailed Conceptual Designs
Hampton/Inwood Area

ORIGINAL CHARRETTE DESIGN

DETAILED CONCEPTUAL DESIGN

DRAFT
Preliminary, subject to Change
Northern Park Access Area

ORIGINAL CHARRETTE DESIGN

DETAILED CONCEPTUAL DESIGN

DRAFT
Preliminary, Subject to Change
“Horseshoe” Area

ORIGINAL CHARRETTE DESIGN

DETAILED CONCEPTUAL DESIGN

DRAFT
Preliminary, Subject to Change
Project Animation

- Driver View @ 45 m.p.h.
- “Birds Eye” Park View
Oversight & Advise
Parkway Oversight

City Council Transportation & Trinity River Project Committee

Briefings:

• 09/15/15 Update
• 10/26/15 Update
• 03/21/16 Findings and Recommendations
Advisory Committee Review

• On January 15, 2016, Mayor Michael Rawlings notified the Dallas City Council of the appointment of the aforementioned Advisory Committee members by Council members Sandy Greyson and Jere Thompson, Jr. The purpose of the Advisory Committee was to:
  • Review the work of the Trinity Parkway Technical Committee and to opine on whether the final design of the road was true to the 20 ideas presented to the City Council by Larry Beasley and the Design Charrette Team.
  • Share these opinions with the City Council through commentary provided to the City Council Transportation & Trinity River Project Committee.

• The full Advisory Committee met twice to review and provide information on the technical work prepared during the Technical Committee process.

• Additional meetings and discussion were also held among various Advisory Committee members, and their report is provided as part of this document.
Parkway Advisors

Advisors:
• Councilmember Sandy Greyson
• Jere Thompson

Advisory Committee:
• Councilwoman Sandy Greyson, Co-Chair
• Jere Thompson, Co-Chair
• Ambassador Ron Kirk, Former U.S. Trade Representative & Dallas Mayor
• Representative Rafael Anchia, Texas House
• Angela Hunt, Former Councilwoman
• Chancellor Lee Jackson, University of North Texas and Former County Judge
• Mary Ceverha, Founder & Former Trinity Commons Foundation President
• Robert (Bob) Meckfessel, Former American Institute of Architects Dallas President
Appendix
Background

• The first “river freeway” was identified in the 1967 DFW Regional Transportation Plan and was also included in the Consolidated Plan for Open Space Development of the Trinity River System adopted by the Dallas City Council in 1970.

• In the summer of 1994, The Trinity River Corridor Citizens Committee (“TRCCC”) began looking at the Trinity Parkway as part of their vision for the Trinity River Corridor, within the City limits. Their report was approved in May 1995 by the Dallas City Council and recommended a levee couplet to accommodate major traffic movements to different directions while providing access to recreational areas.

• The Trinity Parkway Corridor Major Transportation Investment Study (“MTIS”) was occurring parallel to the TRCCC work and ultimately recommended a 8-lane, 45 MPH split parkway, inside the levees, from SH-183 & IH-35 to US-175 with some or all of the road being tolled (“The Trinity Parkway”). The MTIS was approved by the Dallas City Council in September 1997.
Background (continued)

• The 1998 Bond Proposition 11 was approved by the citizens and included $84M for the Trinity Parkway. In January 1999, the City entered into an interlocal agreement with the North Texas Tollway Authority (“NTTA”) and Texas Department of Transportation which set the stage for advancing the Environmental Impact Statement (“EIS”) for the Trinity Parkway.

• During the early 2000s, the Balanced Vision Plan (“BVP”) initiative began and the Trinity Parkway vision ultimately changed from a split parkway to a combined parkway along the east levee. The Dallas City Council approved the BVP in December 2003 and amended in March 2004, which included the Trinity Parkway.

• The Trinity Parkway Environmental Impact Statement was completed and a federal Record of Decision (“ROD”) was made in April 2015, selecting Alternative 3C as the only practicable alternative for construction.
In April 2015, the Dallas City Council was presented with the Trinity Parkway Design Charrette Report ("Charrette Report") which was prepared by a team of external experts in urban, transportation, landscape, and environmental design ("Design Charrette Team"). This report primarily focused on the proposed Trinity Parkway where it converges with the Dallas Floodway north of Hampton/Inwood and exits the Dallas Floodway south of MLK/Cedar Crest. The Charrette Report was prepared prior to the ROD.
Trinity Parkway Design Charrette

The Design Charrette Team’s vision was for a scaled down, park-accessible Trinity Parkway rather than a limited access highway. This has effectively been envisioned as a first phase of a staged ROD-approved ultimate scheme. The Charrette Report reflects 20 key ideas in four categories as follows:

• **Confirmations**: Four (4) ideas confirming solutions from the proposed Trinity Parkway Scheme 3C, as proposed in the ROD;

• **Variations**: Five (5) ideas recommending variations from the ROD for “immediate implementation”;

• **Design Refinements**: Seven (7) ideas representing further refinements of the ROD representing “detailed design for immediate implementation”;

• **Development Strategies**: Four (4) ideas representing an economic development strategy, maximizing the park and Parkway, defining four major urban districts and compatible development at both the north and south ends, before the Parkway joins the existing highway system.
Dates and Locations of Public Forums

- 5/26/15 – El Centro College, West Campus, 3330 N. Hampton
- 5/28/15 – Parkhill Junior High, 16500 Shadybank
- 6/2/15 – Dallas Regional Chamber, 500 N. Akard #2600
- 6/8/15 – Fair Park, Women’s Museum, 3800 Parry
- 6/9/15 – Wilshire Bank Community Center, 2237 Royal
- 6/10/15 – University of North Texas at Dallas, 7300 University Hills
- 6/11/15 – Cedar Crest Golf Course, 1800 Southerland
- 6/15/15 – Knights of Columbus, 10110 Shoreview
- 6/16/15 – Walnut Hill Recreation Center Ballroom, 10011 Midway
- 6/22/15 – Methodist Dallas Medical Center – Hitt Auditorium, 1441 N. Beckley
- 6/23/15 – Dallas City Performance Hall, 2520 Flora
- 6/24/15 – 6th Floor Museum, 411 Elm