INTRODUCTION & MISSION STATEMENT
The UTA Center for Metropolitan Density (CfMD) research supports the premise that greater Density produces the most Economically Productive, Fiscally Efficient, Environmentally Sustainable, and Culturally-Supportive environments.

BENEFITS OF DENSITY
UTA CfMD believes that the benefits of greater density are:

Economic Productivity
Density of Investment promotes Fiscal Efficiency and Higher Tax Rates

Value Creation
Dense Development optimizes efficiency of expensive infrastructure such as Public Transportation

Business Processes
Workplace Density provides Improved Productivity and Efficiency; and a readily accessible Talent Pool.

Social and Cultural Benefits
Closer Proximity fosters Social Interaction, which supports greater Retail offerings and Cultural Variety

Environmental Sustainability
Density requires less Land and can use existing infrastructure, reducing dependency on Natural Resources

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Science-oriented District: As-of-Right respecting Trinity Levee setback.

Trinity Gardens/Dallas Live Page 15
Utilizing slurry wall to add land area for residential and entertainment.
At UTA, Dr. Elín is overseeing the integration of the School of Architecture and the School of Urban and Public Affairs into the new College of Architecture, Planning and Public Affairs (CAPPA). This unified college interweaves the unique gifts and expertise of each person and profession to co-create urban, ecological, and social fabrics that unleash the inherent potential of places and communities in the DFW region and beyond.

“DFW, like many Metropolitan areas in the Southwest, faces unprecedented growth and swiftly changing demographics. At UTA CAPPA, we have a unique opportunity to explore higher density solutions to provide better places for all people since we now have these disciplines combined in a structure that will encourage cross-collaboration. When you bring architecture, urban planning and public affairs together, the synergies are tremendous.” - Dean Ellin

**2016 CfMD Research Topic**

**DenSifying Existing Urban/Suburban Nodes**

Metropolitan growth, changing Demographics and Workplace preferences, are influences on our Advanced Design Studio which focuses on higher densities.

- CBD’s are evolving as new Live/Work/Learn environments and offer more walkable and secure opportunities offering new lifestyles for users seeking more urban environments.
- Urban Nodes, characterized by confluence of road networks, telecommunication and utility infrastructure, exist in both urban and suburban settings, from low to high Densities.
- Expanding these Nodes with retail, offices, hotels, and residential, can contain sprawl, enhancing industry Clusters.
- Increasing density at existing Nodes optimizes growth while preserving open space and community character by maximizing road networks and concentrated infrastructure.

**Seeking Research Sponsors**

Node expansion concentrates assets as long-term investments; creates opportunities for creative Retail and Foodservice due to population density; and landscaped open space creates Brand Nodes as unique special Districts. UTA CfMD proposes to focus 2016 research on potential investment opportunities and growth potentials in the DFW Metro Region, and is seeking Sponsors to support this strategy.

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**Dallas Center Core Comparisons**

1952

CBD region’s Center; preferred address for Corporations and Professional Offices; Host to Specialty Retail and major Department Stores; Rail primarily freight; Focus at local Avenues + Streets.

1987

Suburban Office and Residential expansion; Retail and Department Stores migrate; CBD feeds major Highways; Re-use of older Office buildings for Residential; Rail consolidated.

2012

CBD enveloped by Freeways; Focus of DART Lines; Uptown Residential explodes and CBD follows trend; Uptown Offices command higher rents; CBD supports restaurants and retail.
Special Development Entities

Long used to implement complex projects which extend over several political and economic cycles. Special Entities are formed with authority for issuing bonds, land acquisition, execute infrastructure improvements, and for design and implementation reviews. Regional Airport authorities, Toll Roads are some examples. In commercial real estate, Tax Increment Finance (TIF) Boards, and Building Improvement Districts (BIDs) are other examples.

Vision Plan implementation may require a single entity, a Master Development Corp, with institutional and private sector support to withstand market/political cycles and with delegated authority to issue Tax Increment Bonds for funding Parcel acquisition, infrastructure, and Streetscape improvements. The subsidy is from Incremental City Tax revenues which would otherwise not be produced—hence cost the general Public nothing more. Just a portion of the future Increment which is eventually paid-off, giving the City full tax proceeds and the benefit of higher property values.

Public/Private Partnerships work best when market rate development is not feasible due to land cost or infrastructure hurdles, particularly compared to comparable suburban opportunities. Thus both sides, Civic/Public, and Private Developer/Financier, gain equal benefit without adding any new Fiscal burden to citizens.

Master Dev. Corp. Competitive Advantage

- **Continuity**: Single point of Contact thru Economic/POLitical Cycles
- **Authority**: Issue Bonds + Acquire Sites + Design Improvements
- **Clarity**: Vision Plan + Stakeholder Consensus + Design Guidelines
- **Implementation**: Bond Financing + Bid/Award Infrastructure
- **Governance**: Independent Board + Civic/City Agencies + Exec Director

The Dev Corp’s inclusive advocacy, executive authority, and consistent decision reliability, is very important to the private sector. Reliability and capacity to issue Infrastructure bonds mitigates risks for financing and builds public belief in the Vision Plan. The Public/Private format offers an approachable organization for civic groups, architects, engineers, and planners who support the goals of the Vision Plan and can see that long-term implementation is achievable. Finally, the proven reliability of specific-purpose entities is recognized by Institutional Finance as similar difficult projects in other cities have become secure investment zones today.

Master Dev. Corp. Process Map

Chart illustrates Process Map for a Master Dev Corp charged with the revitalization of an Urban District. Note stages for creation of a Vision Plan with Civic/Public input and higher density to produce Tax Increment to fund Infrastructure and acquire Parcels.

The Dev Corp is accessible, and transparent, with experienced Senior Management and a representative Public/Private Board, to maintain organization’s goals over protracted political and economic cycles.

CfMD Whitepaper: Public/Private Partnerships

<table>
<thead>
<tr>
<th>Flexibility &amp; Reliability</th>
</tr>
</thead>
<tbody>
<tr>
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</tr>
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</table>

Public/Private Dev Corp Examples

- **Baltimore Inner Harbor Corporation**: Deteriorated Inner Harbor adjacent Baltimore CBD; prompted corporate and civic leaders to acquire parcels, and issue Infrastructure Bonds. Resulting in a two-decade transformation into one of the most visited waterfronts in the nation. With new Hotels, Offices, Retail and Restaurants extending the City workplace core.

- **Battery Park City Authority**: Formed to implement a Lower Manhattan Live/Work District with fill from adjacent World Trade Center; issued bonds based on future tax revenues; high urban design standards and governance through market cycles resulted in fully paid-off bonds with new annual revenue distribution available for cultural/educational uses.

- **Pennsylvania Ave. Dev. Corp.**: Organized to revitalize Pennsylvania Ave from the US Capitol to the White House. Created Master Plan, sold parcels to Developers subject to serious design reviews; Completed over several DC Mayoral administrations; Resurrected real estate Values and Image quality; Now premiere location for Hotels, prestige Offices, Embassies, Museums, and High-end Residential.

- **BIDS -- Bryant Park Restoration Corp**: Building Improvement Districts are another form of Public/Private partnering whereby land owners contribute extra tax assessments dedicated to restoration of premium property values, such as NYC’s Bryant Park by Open Space management and extra security/dedicated to restoration of premium property values, such as NYC’s Bryant Park by Open Space management and extra security/

Organization Life Cycle and Key Activities

- **Initiate/Plan**: Master Dev Corp Initiation includes: creating an achievable consensus Vision Plan with Stakeholders; Obtaining Tax Increment assessments; Issuing Bonds, and acquiring key Parcels. Implementation Includes: Funding from Infrastructure Bond sales; Issuance of Developer RFPs; Sales of Improved Parcels, and negotiation of Development Agreements subject to Design Standards.
Developers & Designers
Roundtable focused on development policies and design prototypes to create high density live/ work / learn /play environments.
- Downtown is separated: West End from Victory; Central core from South Dallas and Trinity; Scenarios could repair these connections.
- Changing demographics and new residents seeking alternative lifestyles create new opportunities for experimentation with both re-kidnial and Workplace formats.
- Most Dallas CBD adaptive reuse buildings already transformed; new Residential sites need to be assembled from underutilized parcels and more parking created.

Stakeholders
Roundtable focused on Stakeholders with vested interest in Dallas central core to grow, as both a Workplace, Living and Learning environment. Specific viewpoints ranged from End Users such as architectural and law firm tenants to Stakeholders like regional transportation and economic development agencies.
- Knowledge workers increasingly look to the Dallas core as an enticing workplace Environment with a genuine Urban image.
- The nexus of the DART transportation system downtown makes for easy commute for many professional firms.
- Freeway debate focused on whether high-speed access to downtown is as important as the quality of circulation within the core. Many agreed that Traffic is like a Gas, expanding to fill any space provided.
- Some claimed Dallas CBD surrounded by “Traffic sewers” fueling debate “Streets versus Roads” and methods to slow inter-regional traffic.

Brokers & End Users
Panelists explored key drivers for Corporate and Professional End-Users who prefer Center City locations, what design trends may influence the corporate location decision, and what the Brokerage Industry learns from its client base, including these observations:
- Changing demographics and the 3 generation workforce means more younger knowledge workers want a more active and urban lifestyle.
- Millennials now outnumber Baby Boomers, adding to urban rental demand with later marriage and children.
- Corporates favor large floor plates which favors suburbia— but employees want interaction, walkability and better retail/foodservice choices.
- Parking Ratios are much higher and less expensive in Suburban projects. Transit may eventually overcome this disadvantage in favor of Urban.

CfMD Outreach
Ft. Worth ISD Briefing
Advisory Board member Andy Taft, President FWI Inc., at far right above, previews CfMD scheme for special Learning Institutions with FW ISD Trustees.

D Academy
For the past two years CfMD Director Buckley has presented urban DFW scenarios to a selected group of young professionals as part of D Magazine’s Academy.

Pension Real Estate Assoc
Washington DC
Director Buckley, who served as GSA Advisor for both projects, introduces Ramsey Meisher of Forest City, at middle above, to discuss the Yards, a Live/Work new district on the Anacostia riverfront. David Orowitz of the Trump Organization, at right above, to describe the $275 Million repositioning of the Old Post Office on Pennsylvania Avenue into a Luxury Hotel.
Three Alternative Scenarios
The CfMD Advanced Design Studio analyzed three alternative layouts to continue thru traffic and provide local access. All involve demolition of existing I-345 freeway. ROW re-use, vacant parcel acquisitions, and high density MXD.

Boulevard Scenario
Least expensive Scenario utilizes Boulevards on either side of the existing freeway, with subsequent demolition and Park replacement. Excess right-of-way reclaimed for high density MXD, with the acquisition of vacant or underutilized sites.

Center Park Scenario
Mid-range cost Scenario features Roundabout connections, a reconfigured Cesar Chavez Boulevard with a new Boulevard to the East. Significant parcels acquired for high density MXD development will offset Infrastructure costs.

Park-Covered Tunnel
Most expensive Scenario offers a By-Pass with Park-covered Tunnel as focus: significant underutilized parcels acquired for high density Live/Work, Family Courtyard Residential, SkyRide transit loop, and DART-focused Citi Center Square.

The 1-345 Removal Debate
Downtown Dallas is ringed by freeways, and public discussion has focused on removal of I-345 to expand the urban core, reconnecting to Deep Ellum historic entertainment district and to the expanding Baylor Medical Center.

D Magazine, Dallas AIA Columns Magazine, and Civic groups have debated the benefits for urban living with removal of the freeway. Our Scenarios show alternatives for thru traffic, Infrastructure costs offset by increased density and new TIF generated, and Residential and modern Workplace choices. Thus each Scenario covers Infrastructure at no new cost to the Public. Thus each Scenario covers Infrastructure at no new cost to the Public.

Chart below compares the three Scenarios and resulting density of land uses, generation of Tax Increment allocated to Infrastructure, and new Jobs and Residents produced.

Feasibility Testing
UTA Students, most with no prior financial experience, now prove Financial Feasibility with our templates which arrayed Hard Costs based on Unit Cost comparables, Revenues based on market rates, and Soft Costs to calculate Total Development Cost.

Discounted Cash Flow (DCF) templates then establish Net Operating Income. A quick Feasibility Test Capitalizes Yr 3 NOI which should be larger or equal to the Total Development Cost. The DCF Template also generates an Internal Rate of Return (IRR) as investment return metric.

While architects traditionally manage projects by controlling project costs, our methodology illustrates the advantages of managing both Design and Financial Performance by creating Investment Value.

Presentation Juries
Studio MXD/Residential and Office / Workplace scenarios, are reviewed by outside expert Juries of Developers, City Agencies, Designers and Financiers for industry feedback.

TIF Financing
Diagram below illustrates TIF Financing generated by higher densities to fund infrastructure and streetscape costs.

Economic Comparisons
- Costs/Density
Chart below compares the three Scenarios and resulting density of land uses, generation of Tax Increment allocated to Infrastructure, and new Jobs and Residents produced.

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Density Year 3</th>
<th>Tax Increment</th>
<th>Jobs</th>
<th>Residents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boulevard Scenario</td>
<td>25,000 sf</td>
<td>$5,000,000</td>
<td>150</td>
<td>2,000</td>
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<td>Center Park Scenario</td>
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<td>Park-Covered Tunnel</td>
<td>50,000 sf</td>
<td>$10,000,000</td>
<td>300</td>
<td>6,000</td>
</tr>
</tbody>
</table>

Design Cycle
Studio Design Process shown at right is focused on density and value creation, creating highest Tax Increment Revenues, Jobs, and Architectural quality.

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HKS Specialists
As CfMD Studio resources, HKS Specialists were guest speakers such as Heath May at center above, Director HKS LINE (Laboratory for Intensive Exploration) for design, research and advancing architecture with evolving technology.

Studio Objectives
UTA Advanced Design Studio students learn to test Designs with Feasibility methodology including Cash Flow Models, to achieve given Investment Return rates. Solutions are sought to create significant Tax Increment to offset Project Infrastructure costs and parcel acquisition.

Studio Sponsors
UTA Advanced Design Studio was held off-campus over the past 3 years at HKS Inc. enabling presentations by HKS specialists and hosting the Roundtable Series. Sponsors L to R: Dan Noble, HKS CEO; Studio Co- Heads: David Williamson, Presentation Juries
Studio MXD/Residential and Office / Workplace scenarios, are reviewed by outside expert Juries of Developers, City Agencies, Designers and Financiers for industry feedback.

Advanced Design Studio
Scenarios for I-345 Teardown

The 1-345 Removal Debate
Downtown Dallas is ringed by freeways, and public discussion has focused on removal of I-345 to expand the urban core, reconnecting to Deep Ellum historic entertainment district and to the expanding Baylor Medical Center.

Challenge: Reuse I-345 Corridor at No Public Cost
Freeway Barrier
Dallas CBD cut off--rom Deep Ellum by I-435 Freeway

Boulevard Scenario
Least expensive Scenario utilizes Boulevards on either side of the existing freeway, with subsequent demolition and Park replacement. Excess right-of-way reclaimed for high density MXD, with the acquisition of vacant or underutilized sites.

Center Park Scenario
Mid-range cost Scenario features Roundabout connections, a reconfigured Cesar Chavez Boulevard with a new Boulevard to the East. Significant parcels acquired for high density MXD development will offset Infrastructure costs.

Park-Covered Tunnel
Most expensive Scenario offers a By-Pass with Park-covered Tunnel as focus: significant underutilized parcels acquired for high density Live/Work, Family Courtyard Residential, SkyRide transit loop, and DART-focused Citi Center Square.

The 1-345 Removal Debate
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Challenge: Reuse I-345 Corridor at No Public Cost
Freeway Barrier
Dallas CBD cut off--rom Deep Ellum by I-435 Freeway

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Least expensive Scenario utilizes Boulevards on either side of the existing freeway, with subsequent demolition and Park replacement. Excess right-of-way reclaimed for high density MXD, with the acquisition of vacant or underutilized sites.

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A New Urban District
Park-Covered Tunnel enables:
- I-345 Traffic By-Pass
- Higher density on Excess Parcels to monetize cast of the Deck Park
- Provides loop for SkyRide people mover
- Expands Dallas Center Core
- Variety of Residential and Workplace choices
- Transit-Oriented CitiCenter, Media Forum and Urban Square

Urban Retail Village
Urban Retail Village features Micro Lofts atop Street-oriented Lifestyle Retail and Cafes. Located between High Density Residential and Transit- oriented Citi Square.

The Urban Retail Village offers a landscaped Boulevard lined with Specialty Retail and Commercial, supported by four corner Anchors, a Mercado for fresh foods, a Cooking School with Video facilities, and Catering Hall.

Urban Entertainment Center
Reconnecting with Deep Ellum and its eclectic collection of bars and restaurants, a new Urban Entertainment Center will offer a live Music Venue with Video broadcast, Interactive Sports Bars, Art Cinemas, Nightclubs, and a Boutique Hotel.

The Urban Entertainment Center offers a landscaped Boulevard lined with Specialty Retail and Commercial, supported by four corner Anchors, a Mercado for fresh foods, a Cooking School with Video facilities, and Catering Hall.

Family High Density + Courtyard Residential
Located on ten sites directly facing the landscaped Park deck, Family-oriented Residential ranges from high-rise 2-3 bedroom units to low-rise stacked Townhomes, offering a variety of Residential choice. Landscaped courtyards feature recreational and leisure amenities, significant school Childcare facilities, and adjacency to the Park provides Open space for Families.

Park Themed Landscapes
Park features special Theme zones such as Earth, Air, Fire and Water. Landscapes express these basic elements, as the above sketch illustrates the Water theme. The park serves as “Value Address” and a proven urban amenity for high density Residential.

SkyRide People Mover
Elevated SkyRide monorail with automated tandem vehicles operates with short headways on a loop through the Park and Citi Center, connecting the Office core, Arts District, Convention Center and in the near future, the Houston/DFW Fast Train Terminal.

Citi Center and Urban Square
At the crossing of two DART lines and the SkyRide loop, the Citi Center Square, lined with Cafes and Retail is the focus for a new Workplace expansion of the Dallas Office Core. High-rise Office and Boutique Hotel enjoy the Citi Square address premium and transit options.

The signature high-rise Office Buildings offer large floor plates with ground-floor Retail and a Boutique Hotel. These frame the intersection of two DART lines and a special Media Forum to create a large European-style Square. The elevated SkyRide people mover loops the CitiSquare, connecting Transit to Dallas' existing Office Core, and Civic/ Cultural institutions.

CitiSquare will be one of the largest public Open Spaces in Dallas. Animated by Transit choices, the high density envelope created by the Office and Hotel, and Urban Square with sidewalk Cafes.

Interactive Media Forum
Citi Center features a semi-enclosed Interactive Media Forum. Large scale Digital Displays show information, world news, local events, online opinion poll, and interactive Artline with access from Plaza kiosks and mobile devices.

The Media Forum could become a venue for performances, political events, and displays of new products and technology. The Media Forum will be a major attraction, representing an urbane counterpoint to the Arts District and Tunnel Park.

Scenario Summary
Chart on left shows total Scenario Development of $4.7 Billion generating $318.5 Million of Tax Increment to pay for Infrastructure.
D2 Scenarios Conclusion

I-345 Tunnel By-Pass Scenario Benefits

Economic Development War Chest
City Tax NPV (over 60 yrs) to $1.3 Billion. TIF pays Infrastructure to $318.5M. Cumulative City Tax (60 yrs) to $7.3 Billion.

Expands Workplace and Regional Impact
High value Workplace and increased Residential choices re-branded Urban experience captures DFW fair share.

Live/Work/Lease District
Produces 41,500 Employees and Vendor Jobs Walkable Neighborhoods with Parks, Retail and Colleges Residential MXD creates 14,200 new Residents as a Voter Block.

Public Infrastructure Costs
All Scenarios carry $318 Million Infrastructure burden for new Roadways and Parks. We assume no significant TxDOT contribution as Scenarios eliminate a State-owned freeway. Hence, Infrastructure Costs must cover Demo, ROW Parcel purchases, Streetscapes, Roadways and funding of a new “Master DevCorp” for long term implementation over several Political / Economic cycles.

Tax Increment funds Infrastructure, particularly for Park-Covered Tunnel, which is the only Scenario that permits thru-traffic, featuring a Park Cover as “Address Value” for high density Residential and creates the largest TIF. ROW and Parcels purchased by the “Master DevCorp” are later sold to developers at increased prices based on the created environment. Each Scenario passed Feasibility tests using market rate Capitalization and Discount rates, and IRR targets.

Infrastructure Surch-Charge Costs Area $ Shocks Soft Costs DevCorp Hard $ Sub Total

TIF GENERATED—30% of new Taxes produced Capitalized at 5.5% yields $40.1 Million for Infrastructure; 60% New City Taxes.

Trinity Gardens/Dallas Live: Stony Wall Reclams Land
Stony Wall at Levee top reinforced with 3-level garage, supports development with direct views on Trinity Lake and open space. Stony Wall reinforces earth levee, stiffened by garages which enable high density development generating highest Tax Increment allocated to Infrastructure.

Trinity Tech: As-Of Right with Levee Setback
Trinity Tech allows As-of-Right construction by respecting 150 foot setback from Levee top, creating landslide open spaces for landscape trail and play areas. Family-oriented Residential MXD with extensive Street Retail south of Woodall Rogers also features Geotech Tower and Hotel fronting I-35E.

A new Learning District on the north site has STEM High School, College-Level Media Academy, and a prototype Digital Museum and interactive Science Plaza for public science-oriented events with pedestrian access to the landscaped Continental Bridge overlooking the Trinity.

TIF GENERATED—30% of new Taxes produced Capitalized at 5.5% yields $68.5 Million to fund Infrastructure; 60% New Taxes to City.

Trinity Tech: As-Of Right with Levee Setback

Trinity Park
Tailway and Trinity Lake and linear park Proposed

Trinity Gateway
Vacant sites of Woodall Rogers and I-35E adjacent Dallas CBD could host a new Live/Work mixed use District with unique access to the Trinity River.

Critical Success Factors
- Fund Public/Private DevCorp to manage multi-year program
- Create 1-35E visibility and Trinity River Access as Live/Work/Play Zone
- Maximize TIF to fund Infrastructure from City Taxes that would otherwise never occur

Levee Protection
The Trinity River floods regularly, sometimes within feet of the 30’ earthen Levee which protects Dallas CBD.

Trinity Gardens/Dallas Live: Slurry Wall Reclains Land
Stony Wall at Levee top reinforced with 3-level garage, supports development with direct views on Trinity Lake and open space. Stony Wall reinforces earth levee, stiffened by garages which enable high density development generating highest Tax Increment allocated to Infrastructure.

Aerial views show Trinity Gardens south side MXD Residential with pierced Luxury Tower facing the Trinity, and north side with Entertainment District including Hotel/Performance Venue fronting the Trinity and an X-Sports Center and twin MicroFlat prototype apartment buildings.

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As-Of Right Section
150 ft Setback creates Trail serving Geotech Tower + Hotel + Residential + Science Institutions

Site Area 3.714,460 SF

Aerial views show Trinity Gardens south side MXD Residential with pierced Luxury Tower facing the Trinity, and north side with Entertainment District including Hotel/Performance Venue fronting the Trinity and an X-Sports Center and twin MicroFlat prototype apartment buildings.

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Trinity Tech Project Summary
Chart shows $327 Million Trinity Tech new District for 1,000 office workers; 2,000 Residents; 117,000 sf of advanced Learning/Cultural intuitions; and $40.1 million TIF Financing.

Trinity Tech Live/Work/Learn District

<table>
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<tr>
<th>Projects</th>
<th>Parcel</th>
<th>Bldg GBA</th>
<th>DevCost</th>
<th>Land</th>
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<td>165</td>
</tr>
<tr>
<td>Media Academy</td>
<td>48,000</td>
<td>49,000</td>
<td>25.6</td>
<td>6</td>
<td>112</td>
</tr>
<tr>
<td>Digital Museum</td>
<td>13,500</td>
<td>29,000</td>
<td>14.5</td>
<td>1.5</td>
<td>122</td>
</tr>
<tr>
<td>Tot Projects</td>
<td>1,079,700</td>
<td>2,189,700</td>
<td>1,285</td>
<td>327.1</td>
<td>3670</td>
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<tr>
<td>Prkg Garages</td>
<td>1,526,785</td>
<td></td>
<td></td>
<td></td>
<td>38.5</td>
</tr>
<tr>
<td>Dev Area/Cost</td>
<td>3,745,483</td>
<td></td>
<td></td>
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<td>308.9</td>
</tr>
</tbody>
</table>

Trinity Tech is a Live/Work/LearnDistrict oriented to the skills and technology of tomorrow’s Workforce. South portion features: GeoTech Office, Hotel, Family Resi- dential, K-6 Magnet and Daycare Playspace in the Levee setback, Retail and Café seating on streets. North side has special Learning Institutions: STEM High School, College-level Media Academy, and Digital Arts Museum. Shared garage supports the three institutions and weekend activities at Science Plaza hosting STEM Robotic games; looks beta-testing Media Academy student work and Digital Museum Media Board—branding Dallas CBD as oriented to Tomorrow’s Jobs Today.

GEOTECH INSTITUTE
Energy industry think-tank hosts scholars and Symposia. Oil & Gas firms and Startup incubator occupy Office Tower.

BOUQUE HOTEL
Highly visible from I – 35, hosts GeoTech events and visitors. Swim deck and rooftop SkyBar offer Skyline views.

RESIDENTIAL
MXD and Stacked Townhomes face landscaped Boulevard lined with Specialty Retail and Cafes at Intersection Plazas.

LUXURY RESIDENTIAL
Iconic Archway, Ranking Levee-top Restaurants and strong views of Dallas Skyline/Trinity River.

ENTERTAINMENT + MICROFLATS
Aerial shows highway visibility for Cinema, X Sports Center sharing promenade with Cafes and Twin Micro-Plats.

THEME HOTEL
Theme Hotel + Dallas Live Performance Venue are sited atop shared Garage and enjoy superb Trinity River overlook.

K-SPORTS CENTER
Unique Regional Destination X Sports offers Two Shopping/Event Floors + Rooftop Attractions.

Trinity Gardens/Dallas Live Summary
4.4 Million sf worth $716 Million has 1,600 Office workers; 2,140 units with over 3,200 Residents; 285 Hotel rooms and over 300K sf of Retail; generated $68.5 million of TIF.

Gdns/Dlv Drmv Projects | Parcel SF | GBA SF | Units | Dev Cost ($) | Land ($) | Prkg (%) |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Office 1</td>
<td>120,000</td>
<td>160,000</td>
<td>149</td>
<td>50</td>
<td>10</td>
<td>540</td>
</tr>
<tr>
<td>Office 2</td>
<td>100,000</td>
<td>180,000</td>
<td>172</td>
<td>50</td>
<td>10</td>
<td>540</td>
</tr>
<tr>
<td>Market Res</td>
<td>640,000</td>
<td>892,000</td>
<td>270</td>
<td>55</td>
<td>10</td>
<td>294</td>
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<tr>
<td>Luxury Res</td>
<td>395,000</td>
<td>640,000</td>
<td>285</td>
<td>85</td>
<td>11</td>
<td>425</td>
</tr>
<tr>
<td>Microflats</td>
<td>150,000</td>
<td>500,000</td>
<td>294</td>
<td>720</td>
<td>30</td>
<td>230</td>
</tr>
<tr>
<td>Hotel</td>
<td>100,000</td>
<td>150,000</td>
<td>294</td>
<td>720</td>
<td>30</td>
<td>230</td>
</tr>
<tr>
<td>Prkng Garages</td>
<td>1,891,000</td>
<td>2,978,637</td>
<td>3,240</td>
<td>716</td>
<td>3,122</td>
<td>4,061</td>
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<tr>
<td>Entrances</td>
<td>1,683,315</td>
<td></td>
<td></td>
<td>46.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gdns Dev</td>
<td>407 acres</td>
<td>4,469,952</td>
<td>766.5</td>
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<td></td>
</tr>
</tbody>
</table>

Destination Entertainment + Extreme Sports Center
Southern section has Twin Office Towers facing I-35 and Residential MXD Boulevard terminated by high-profile Luxury Residential with views of Skyline and Trinity. Iconic tower has a dramatic Archway, floating pool decks and Restaurants.

North portion has highway visibility and direct access from Trinity Tollway. Entertainment District has Hotel with rooftop Infinity Pool/Bar and a new major live music venue “Dallas Live”.

Trinity Gardens/Dallas Live Summary
Chart shows $327 Million Trinity Tech new District for 1,000 office workers; 2,000 Residents; 117,000 sf of advanced Learning/Cultural intuitions; and $40.1 million TIF Financing.

Trinity Gardens/Dallas Live Summary
4.4 Million sf worth $716 Million has 1,600 Office workers; 2,140 units with over 3,200 Residents; 285 Hotel rooms and over 300K sf of Retail; generated $68.5 million of TIF.
Trinity Gardens/Dallas Live

Comparisons show use of Slurry Wall re-captures valuable land and building area, creating the highest Tax Increment. Additional sites facing Dallas’ Union Station, could deploy the Slurry Wall concept, paid for by TIF created by density. Comparisons show use of Slurry Wall re-captures valuable land and building area, creating the highest Tax Increment. Additional sites facing Dallas’ Union Station, could deploy the Slurry Wall concept, paid for by TIF created by density.

Trinity Tech

Corps of Engineers approval may favor As-of Right Scenario with Trail amenities in the Setback. Levee height requires 4 floors to clear Trinity views, and 5-6 floors to view Trinity Lake. Both Scenarios maximize TIF to fund Shared Garages/Plazas.

New Directions for Urban Design

The city is the ultimate expression of human achievement throughout history, have providing the locus for spiritual, civic and economic institutions. Commerce, culture, religion, and recreation are combined in the intensity of city life.

With accelerated technology and globalization, the city is subject to new and intense pressures which shape infrastructure, supporting systems, and architectural expression. The crucible of new ideas, new governmental entities, and new commerce, enrich the city experience.

Evolving lifestyle preferences and cultural achievement add tension, continuously challenging the normal. Dynamically-managed and imaginatively designed Cit- ies are powerful enablers of workforce, habitation, economic power, and fiscal health.

City Excellence

City Image is the peak of a pyramid including Architectural Quality and Open space; a broad mid- level supports other attributes including Functional Services; and the broadest lowest level rests on the City’s contribution to perceived Qual- ity of Life. Cities who build a pyramid of Architectural Excellence that rests on a broad base of sustainable Quality of Life can best differentiate themselves and maintain competitive advantage.

Conflicting Agendas

Agendas for developing the city of the future, when compared to the already built environment of the historic city, often have conflicts with design ideas that will not fit comfortably within the fabric of the old. Yet the memories contained within many structures and shapes of the historic city must be preserved. It is said that “A city without fine older buildings is like a person without a Mem- ory”. Therefore the historic city must constantly look to save historical elements. These saved architectural fragments stand at as a valuable emotional trace of those who lived before.

But new cities of the future must also respond to agenda to reshape forms and uses to dynamic new ways of doing business, providing new concept housing and workplace environments, bringing clarity to the human experience.

Thankfully, most cities and states have learned to incentivize the preservation of historic structures, recognizing the footprints, materials, and systems are obsolete and cannot easily be adapted to new uses. It is widely perceived that cities that have a blend of historic and new, that create streetscape environments that respect the context of older structures in relation to new, are admired by visitors, and cherished by their inhabitants. The political stress, the administrative burden of insuring this balance, maintaining the loose consensus between commercial development and historic preservation remain a challenging task, but an effort worth its cost.
Open Space as Value Creator

Science Plaza
Three science-oriented educational institutions share parking structure and a Science Plaza funded by TIF proceeds, featuring Amphitheater interactive Solar Kiosks, Robotic competitions and super-scale Media displays.

Vision Planning
Visioning compares existing to an imagined future. Vision Plans have a powerful impact on public impressions by contrasting Before/After Images with very seductive computer renderings and fly-bys—defining a future more elaborately complex than the existing environment. The Vision Plan is a projection, allowing freedom of interpretation. This power of “suspended belief”, a recognized principle in cinema, where the observer fills perceptual gaps when necessary, also present in Vision Plans.

Urban Design generates fascination in the possible future, without challenging concepts with logistics or costs to achieve results. Thus it is crucial to show Economic Feasibility with market-derived Financing standards, and multiple political/economic cycles.

Examples: Open Space = Value
Post Office Square Boston
Open Space creates “Address Value” as with the formation of a Public/Private Partnership of surrounding property owners for removal of an existing city garage, relocated underground below the same parcel, topped with an Urban Pocket Park, café, and fountain, increasing Image and Property Values.

The Yards, Washington DC
On vacant 42 acre site, three way Public/Private Partnership with GSA, and DC Government with developer Forest City, allowed PILOT payments to be allocated to public roads, streetscape, site utilities, and a 5.5 acre Anacostia Riverfront Pier. This Open Space transformed the pioneering location into a $2 Billion Project for 2800 Residential units, 1.4 M sf Professional Offices, and 400K sf of Retail/Restaurants to create DC’s first waterfront community.

UTA Grad Students with work Featured in this Journal

CfMD Research Publications


RJ #2 2013 Roundtables — Urban Core Future Density Survey with AIA/TREC/ULI Studio: FW CBD; NYC Hi-Rise TOD Strategic Industry Clusters

RJ #3 2014 Roundtables: Development Trends; Fusion New Decision Platform; Tax Increment Research; Studio: Dallas Regen: San Antonio Infill

CfMD Articles

Columns Magazine: FW + Dallas Urban Infill Strategies; Assoc Dir Kevin Sloan on Open Space
D Magazine: profile of CfMD Dir Buckley “The Pied Piper of Density”
PREA Journal — CfMD Students present TIF Research at Affinity Group Co-Chaired by Dir Buckley
UTA Magazine — CfMD quotes on future Urban Live/Work Futuristic City.
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