South Central Waterfront Talkabout 1:  
SPP Analysis of Three Scenarios  
(presenter: John Fregonese) January 21, 2014

Austin South Shore

Looking at options with 21st century tools.

Sustainable Places Project

A Working in Texas since 1998!

Scenario Planning

- What is scenario planning?
- Used widely in military and industry
- Especially useful when multiple drivers and uncertainties involved

3 Scenarios Modeled and Tested

Using Envision Tomorrow Plus

- Scenario 1: Base Zoning Build Out
- Scenario 2: SDAT Build Out
- Scenario 3: UT Studio

Planning: traditional approach

The Present  
The Future
The scenario approach

Also called contingency planning

Plausible Future Options

Develop a range of scenarios

Base

A

B

C

Scenarios are Crash Test Dummies

POWERFUL ANALYTICAL TOOLS
Public Domain and Open Source

Scenario Building Process

Model Prototypes Using Real Market Research:
Allows for “Reality-based Visualizations”

Step 1: Model a library of building types that are financially feasible at the local level.
Access to Downtown

- 75%+ of the region’s employment is within 20 minutes of South Shore

- Employment/Destination Access is most influential variable on VMT
  - 4x as powerful as housing density

Recreation and Open Space

Austin South Shore

Scenario Analysis

Beautiful Views
Community Plans and Goals

Many Community Goals have no certain implementable plan
- Access to lake and open space
- Affordable housing
- Environmental performance
- Green infrastructure
- Walkability and bikeability
- Fiscal balance

Auto-oriented Jobs Center
- Jobs to Housing Ratio: 3.5

Poor Connectivity
- Close access to downtown
- Intersection of 3 major arterials
- Low street connectivity
- Large block sizes

Access to Lake is Unclear and Informal

Unpleasant Walking within the District
Current Market Research Informed Buildings Used in Modeling

South Shore Potential Rents Make many Development “Pencil”
- Achievable rents among highest in the city
- Comparable to downtown
- Views and proximity to downtown desirable

5-6 story “wrap” - Texas Doughnut
A cost effective building type
- Little or no underground parking
- Wrapped housing units around above ground parking structure
- High value density – can afford high land costs
  - $100 / sq ft

8 story “courtyard” Building mid / high – rise hybrid
- High rise density with lower building costs
  - No need for pressurized stairwells
- $185 / sq ft in construction costs
- High value density – can afford high land costs
  - $100 / sq ft

12+ story High Rise
- High rise construction costs requires higher than average rents
- Potentially possible in view areas or on water
- $250+ / sq ft in construction costs

3 Scenarios Modeled and Tested
Using Envision Tomorrow Plus
- Scenario 1: Base Zoning Build Out
- Scenario 2: SDAT Build Out
- Scenario 3: UT Studio
**Scenario 1:**

**Base Zoning Residential Build Out**

- Most parcels limited to 60 foot height
- Statesman parcel limited by low sq ft allowance

**Layers of Complex Regulations**

- May not result in the place people want...
- Math rather than Vision
  - Setbacks
  - FAR
  - Coverage limits
  - Height limits
  - Square footage maximums
  - Base Zoning
  - Waterfront Overlay
  - PUDs (individual parcels)

**Street Network**

(Connectivity in intersections per square mile)

**Existing Street Network**

```
0 50 100 150 200 250 300
0 58 101 123 150 180 274
```

**Base Zoning Buildout**

```
50 100 150 200 250 300
50 100 150 200 250 300
```

- 17-Story / 200 ft Buildings
- 3-Story Building
- 5-Story Buildings
- Stepped Back 3-Story building w/ 10% impervious land
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**Building Envelope**
- Every lot in Austin has an envelope
- Math and form
- Current zoning does not guarantee quality buildings within the envelope

**Base Zoning building envelopes**

**Base Zoning Buildout**

**Lake Access is an issue**
- Lake Access Blocked by Building
- Urban Sidewalk Only Required at Building Entrance
- Active Building Front Not Required on All Streets

**Base Zoning Buildout**

**Lake Access is Not a Guarantee**
- Urban Sidewalk Only Required Along Building Edges

**New Development is Being Permitted**
- But *without a cohesive vision*
- The outcomes are uncertain for public and investors

**Scenario 2: SDAT Vision**
- Unified vision
- Significant open space
- Improved connectivity and linkage to lake
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**SDAT Vision Map**

**Intersection Density**
Intersections per square mile

- **SDAT**
- **Existing**
- **New**
- **C&D Recommendation**
- **Directional Access**
- **UJ Judge**

<table>
<thead>
<tr>
<th>Existing</th>
<th>New</th>
<th>C&amp;D Recommendation</th>
<th>Directional Access</th>
<th>UJ Judge</th>
<th>SDAT</th>
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<td>101</td>
<td>121</td>
<td>150</td>
<td>180</td>
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**Public Improvement District (PID)**
- Expand OR new PID for all south of lake
- Focus
  - New roads
  - New parks
  - Drainage/environment

**Tax Increment Financing (TIF)**
- For critical infrastructure: e.g.,
  - Structured parking
  - Roads
  - Open space
  - Affordable Housing

**SDAT Scenario**
- 12-Story Buildings
- Expanded Green Space
- 8-Story Buildings
- 6-Story Buildings
Opportunities Slipping Away

- Recent construction makes untangling the "X" intersection of Barton Spring Road and W Riverside Drive quite difficult.
Scenario 3: UT Urban Design Studio

- Broad mix of building types, including point towers
- Larger units, targeted at families
- Same parking standards as SDAT
- Planning for rail
- Affordable units mixed with market rate

Intersection Density
Intersection per square mile

UT Studio building envelopes
Measuring Performance

Envision Tomorrow Scenario Modeling

Total Population

- Between 5,000 and 9,000 new residents added to the district

Total Housing Units

- Between 2 and 4 times the current housing in the district
**New Housing Units By Type**
- Mid-rise is the predominant building type in each scenario

**Average Rent for New Units**
- All scenarios are within market range for rent
  - Range $2.00-2.35 per sq ft

**Employment Mix**
- SDAT expands employment
- Other scenarios lose employment

**Jobs Housing Balance**
*Trading Jobs for Housing*
- SDAT and UT Studio achieve balance
- Jobs-Housing balance improves transportation indicators
- Regional J-H Balance: 1.33 jobs per household

**New Affordable Units**
- SDAT: 14% of all units
  - UT Studio: 15% of all units

**Transportation Indicators**
Intersection Density Increases Walking

<table>
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<th>Existing Intersections = poor walkability</th>
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Vehicle Use

- 10-25% Reduction in Residential VMT
  - The addition of housing to employment heavy area

Travel Choices within the District

- 2/3rd to 3/4th of internal trips by foot
- More people close to destinations
- Improved street network

Walking Triples in All Scenarios

Transit Trips Double in All Scenarios

Fiscal Performance
New Building Value

• $1-2 billion in new building value

Revenues vs. Expenditures

COA and AISD

• SDAT includes significantly more non-residential development which generates revenue at lower costs

Shared Parking Opportunity

• Increases in walking combined with mixing uses presents an opportunity for shared parking

Net Annual Revenue for COA and AISD

• By including a good mix of non-residential (office and retail) in the area, the SDAT scenario achieves higher revenue
• Residential uses have higher service costs compared to non-residential uses

Open Space and Green Infrastructure
New Open Space (Acres)

- More than double the open space over Base Zoning

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<tr>
<th></th>
<th>Base Zoning</th>
<th>SDAT</th>
<th>UT Students</th>
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<tr>
<td>New Open Space</td>
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New Impervious Cover: Building Area

- Buildings and parking in Base Zoning add significant impervious surface

Impervious Cover: Entire Site

- Green roofs and other green features help reduce impervious surface significantly

Green Roofs and Rain Gardens Make a Difference

- Reduced Runoff into Lady Bird Lake
- No green features required in Base Zoning

What’s Next?

The Magic of Waterfronts Examples from Elsewhere
Portland, Oregon
Industrial waterfront – forty years ago

Portland, Oregon
Now

Portland, Oregon
Then

Portland, Oregon
Before

Portland, Oregon

Williams & Dame Development, Inc.
www.wddcorp.com

Innovative Transportation

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Build Out

Preserves significant natural areas

Interaction with nature

Adopt icons as highly visible public benchmarks for measuring the success of protection and restoration efforts.

Waco Moves Ahead

Now, Austin’s time to plan for a great waterfront!