Austin South Shore

Looking at options with 21st century tools.

Sustainable Places Project

A Working in Texas since 1998!

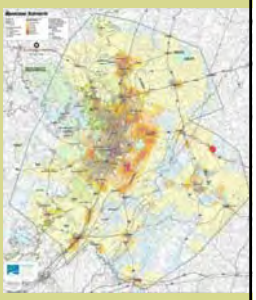
3 Scenarios Modeled and Tested

Using Envision Tomorrow Plus

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

Scenario Planning

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



Planning: traditional approach

The Present

The Future

The scenario approach

Also called
contingency planning

Plausible Future Options

Develop a range of scenarios

Base

A

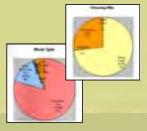
B

C

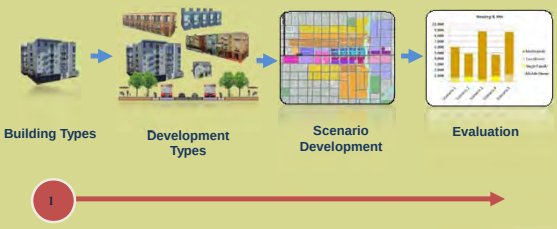
Scenarios are Crash Test Dummies

POWERFUL ANALYTICAL TOOLS
Public Domain and Open Source

envision tomorrow
a suite of urban and regional planning tools



Scenario Building Process



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

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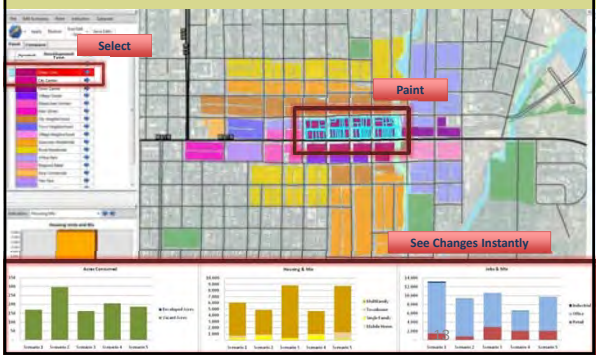
Model Prototypes Using Real Market Research: Allows for "Reality-based Visualizations"

Use Prototypes for Reality-based Visualizations and 3D Modeling

12

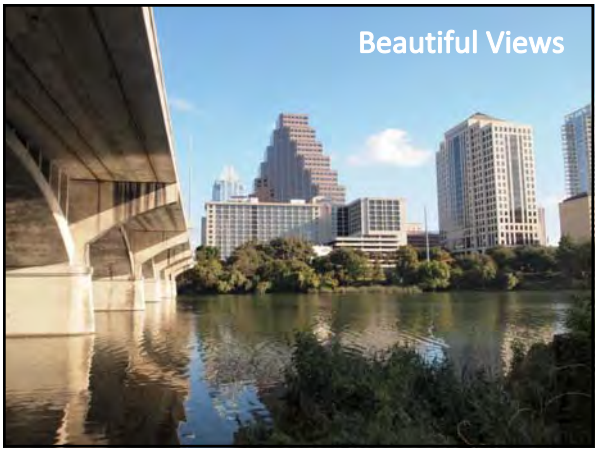
Real-time Scenario Building and Evaluation

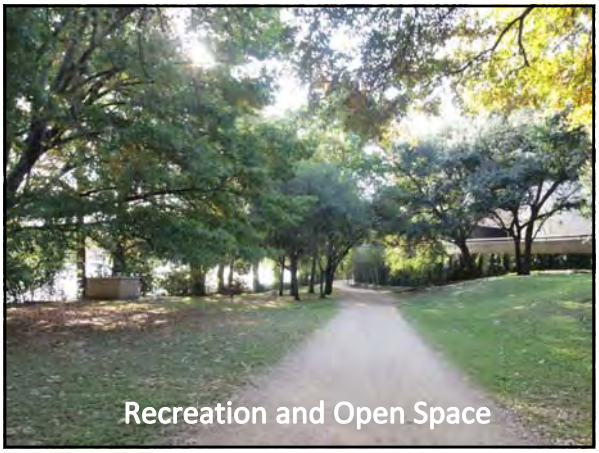


Austin South Shore

Scenario Analysis

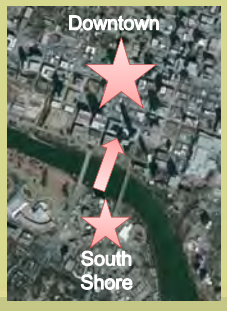
Beautiful Views





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*



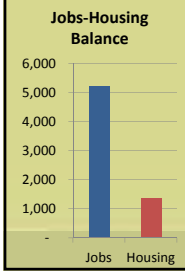
Community Plans and Goals

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

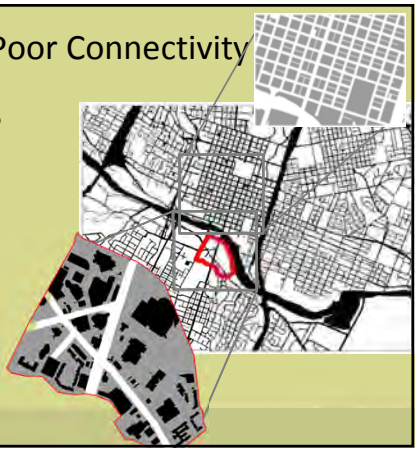
Auto-oriented Jobs Center

- Jobs to Housing Ratio: 3.5



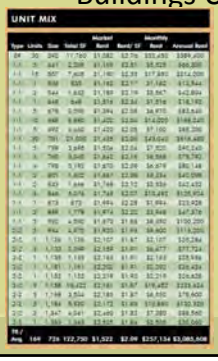
Poor Connectivity

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



Access to Lake is Unclear and Informal

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

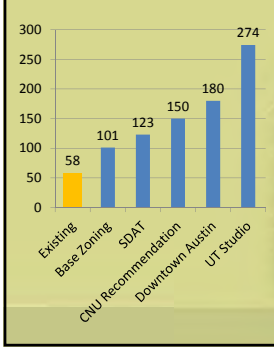
- Most parcels limited to 60 foot height
- Statesman parcel limited by low sq ft allowance

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)*

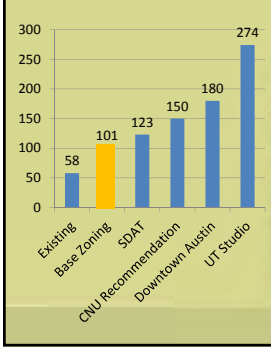
Street Network

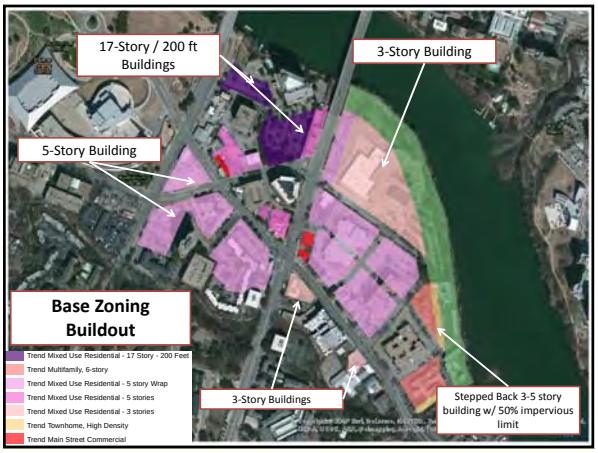
(Connectivity in intersections per square mile)



Street Network

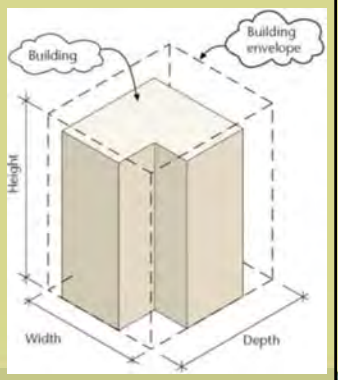
(Connectivity in intersections per square mile)





Building Envelope

- Every lot in Austin has an envelope
- Math and form
- Current zoning does not guarantee quality buildings within the envelope



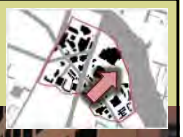
Base Zoning building envelopes

Base Zoning Buildout

Lake Access is an issue

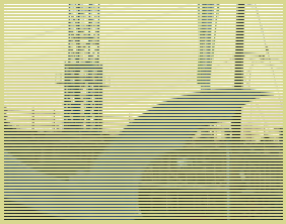
Base Zoning Buildout

Lake Access is Not a Guarantee



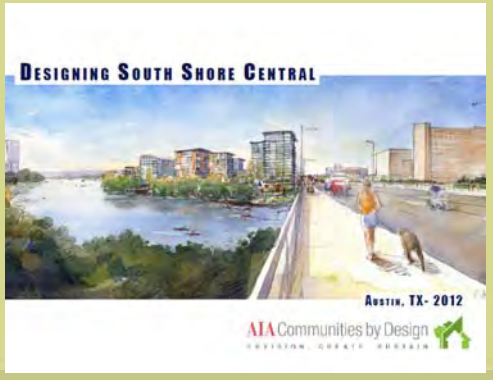
New Development is Being Permitted

- But ***without a cohesive vision***
- The outcomes are uncertain for public and investors



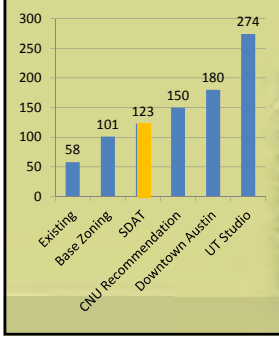
Scenario 2: SDAT Vision

- Unified vision
- Significant open space
- Improved connectivity and linkage to lake



SDAT Vision Map

Intersection Density
Intersections per square mile



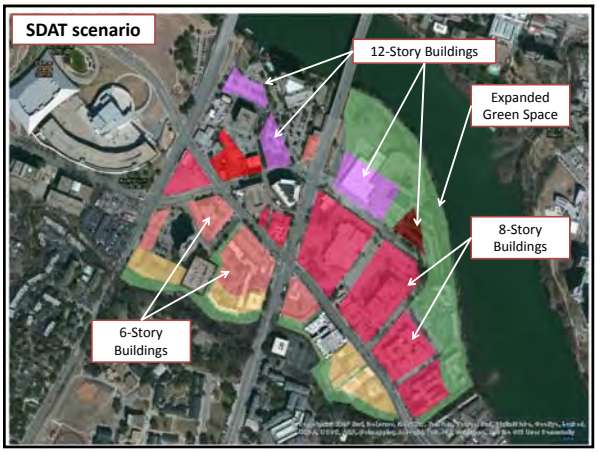
SDAT

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



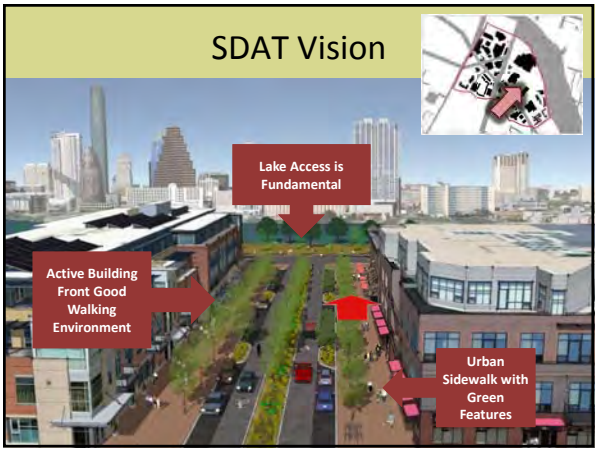
Opportunities Slipping Away

- Recent construction makes untangling the "X" intersection of Barton Spring Road and W Riverside Drive quite difficult.

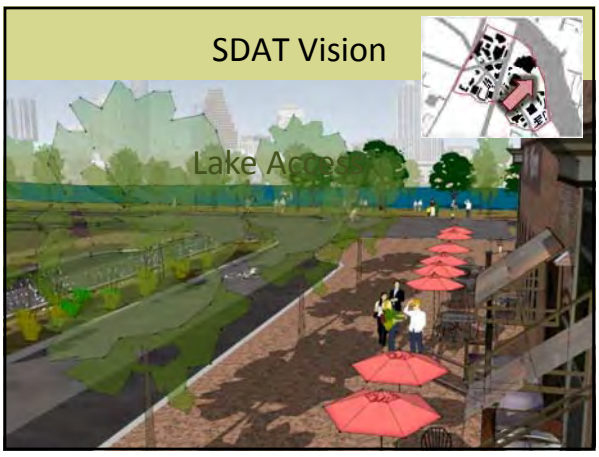
SDAT building envelopes

SDAT building envelopes

SDAT Vision



SDAT Vision



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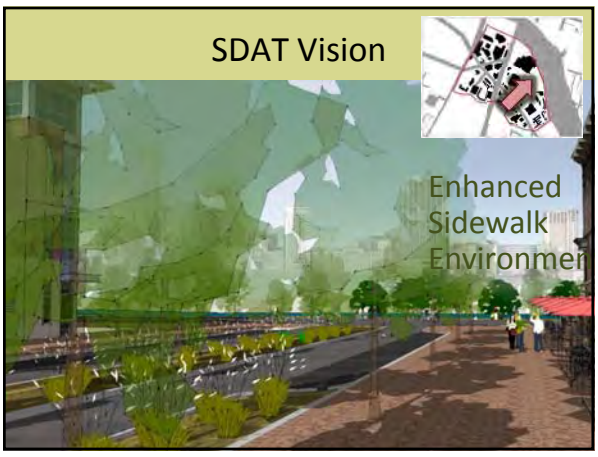
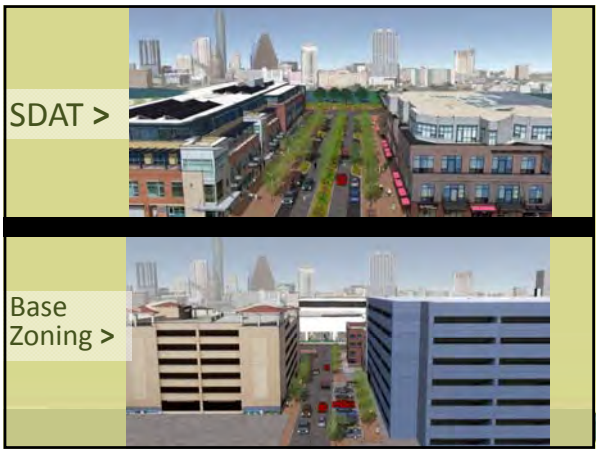
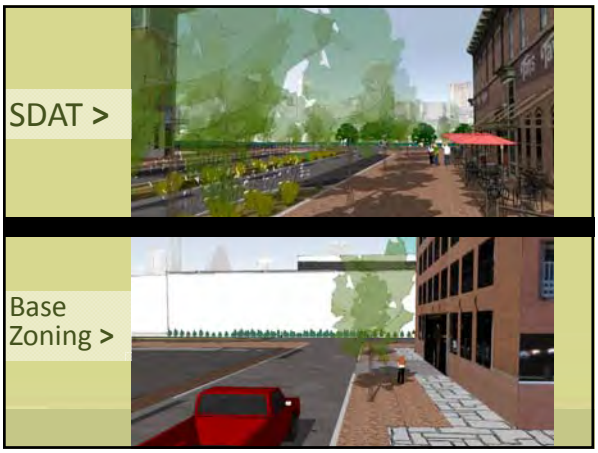


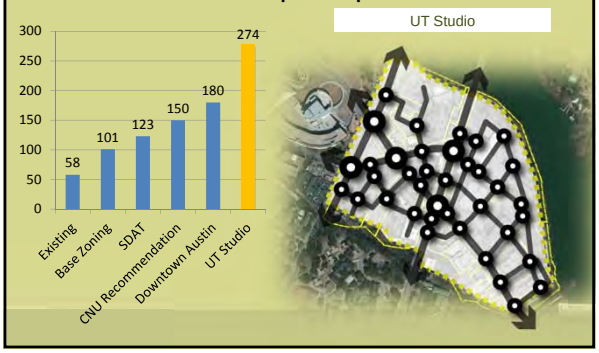




Scenario 3:
UT Urban Design Studio

- 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

UT Studio building envelopes

UT Studio: Images

UT Studio: Images

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Measuring Performance

Envision Tomorrow Scenario Modeling

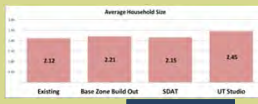
Population and Housing

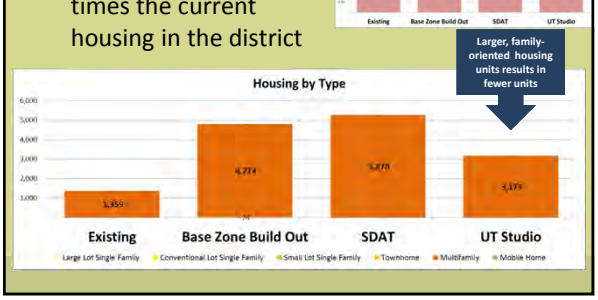
Total Population

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

Total Housing Units

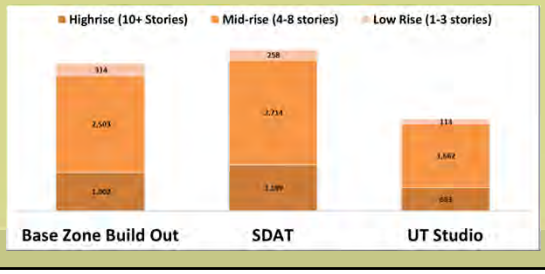
- Between 2 and 4 times the current housing in the district





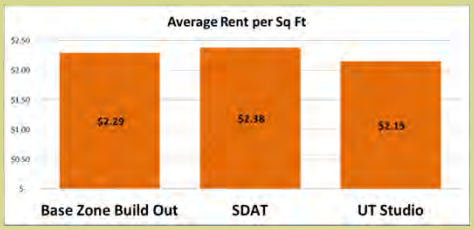
New Housing Units By Type

- Mid-rise is the predominant building type in each scenario



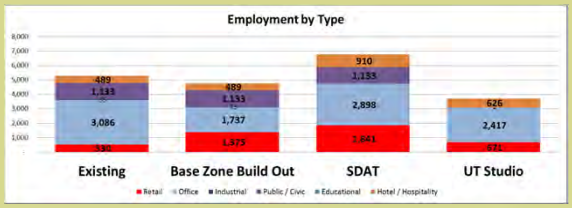
Average Rent for New Units

- 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



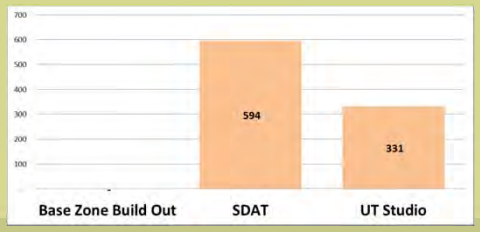
Jobs Housing Balance

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

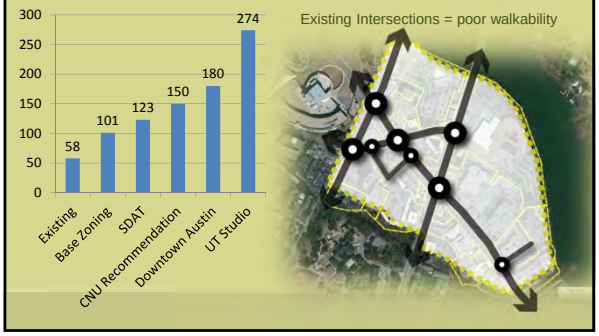
New Affordable Units

- SDAT: 14% of all units
- UT Studio: 15% of all units



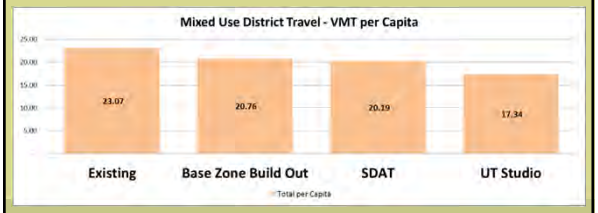
Transportation Indicators

Intersection Density Increases Walking



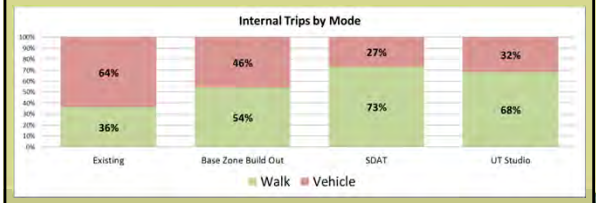
Vehicle Use

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



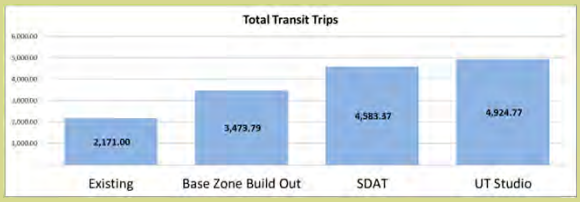
Travel Choices within the District

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



Walking Triples in All Scenarios

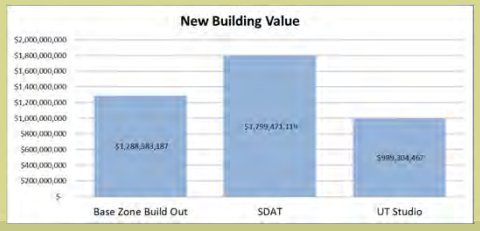
Transit Trips Double in All Scenarios



Fiscal Performance

New Building Value

- $1-2 billion in new building value

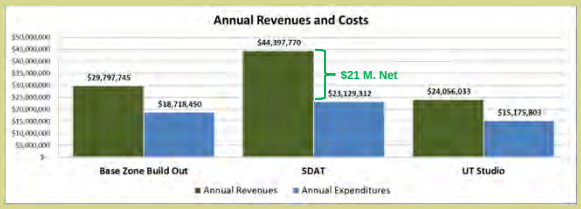


Tax Increment Financing (TIF)

- For critical infrastructure- e.g.:
  - Structured parking
  - Roads
  - Open space
  - Affordable Housing

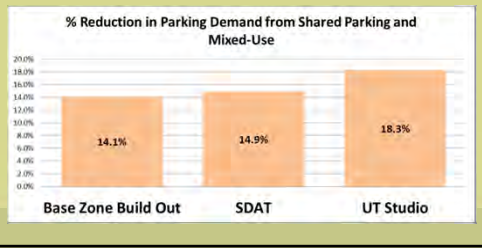
Revenues vs. Expenditures COA and AISD

- 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



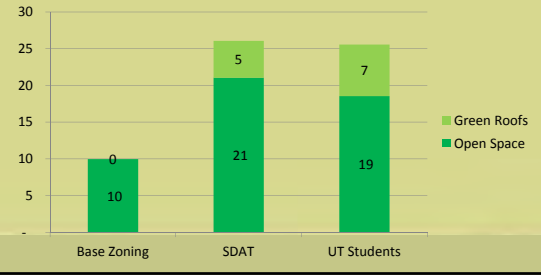
Net Annual Revenue for COA and AISD

- 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

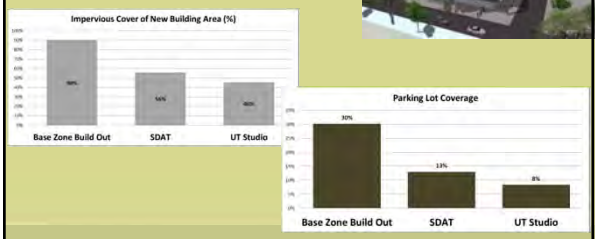
New Open Space (Acres)

- More than double the open space over Base Zoning



New Impervious Cover: Building Area

- Buildings and parking in Base Zoning add significant impervious surface



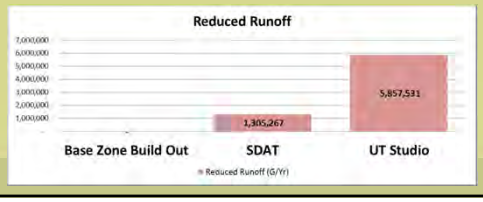
Impervious Cover: Entire Site

New Green Roof Area

- 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

Then

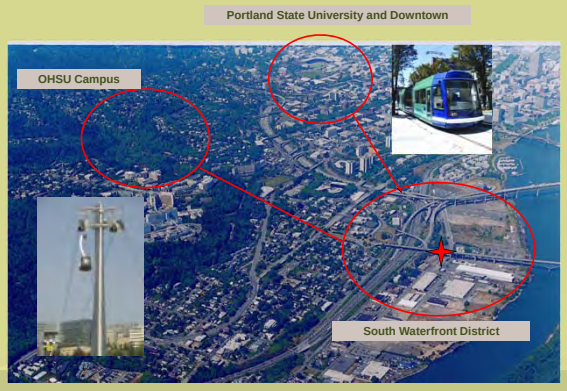
Now

Portland, Oregon

Portland, Oregon

Before

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



Innovative Transportation

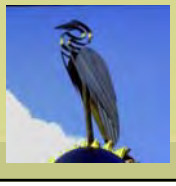
Build Out

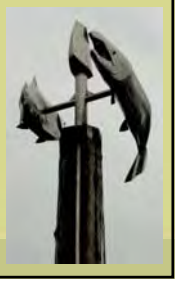
Williams & Dame Development, Inc. www.wddcorp.com

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!