Development Economics Principles

The Basics of Development Economics
Development Costs & Proffer Potential
Metro Impact On Proffer Potential
Developer Economics

To invest Developers must obtain enough income from a project to pay development costs and achieve an adequate investment return.
Adequate Investment Return

*Return-On-Cost Thresholds*

**Commercial**
Net Operating Income = 8.5% of Development Cost

**Apartments**
Net Operating Income = 8% of Development Cost

**Condominiums**
Sale Proceeds = 120% of Development Cost

*Return-On-Cost thresholds change with interest rates and risk.*
When the Developer obtains a return exceeding the return-on-cost threshold there is an opportunity for the Developer to invest in community-oriented amenities.

Examples of community benefits: infrastructure, affordable housing contributions, the provision of open space, etc.
### Illustrative Development Economics
#### 5-Story Residential Project

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
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<tbody>
<tr>
<td>Net Operating Income</td>
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<td><strong>Threshold Return-On-Cost</strong></td>
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Source: W-ZHA
Development Costs

Base Illustrative Scenario
Parking Impacts
Height Impacts
Site Impacts
Other Considerations
Basic Assumptions

- 2-acre site with a value of $2.2 million per acre
- 5 story building with 155 rental residential units
- 1.5 parking spaces per unit required (233 spaces)
- Parking rented at $100 per space per month
- Parking is a blend of 1-story underground and 1 level above ground ($28,000 /space)
- Supportable rent $1,900 per unit
Development Costs: **Base Scenario**

$244 /GSF

- Building Including Site, Construction & Fees: 73%
- Parking @ $28,000 /Space: 16%
- Land @ $2.2 Mil /Acre: 11%

164,500 square feet has a development cost of ~ $40 million.
Proffer Calculation Example

- Assumed rent at $1,900 rent per month per unit
- More than adequate return given development costs
- Money available to fund infrastructure, parks, affordable housing, and/or community benefits

### Illustrative Development Economics
5-Story Residential Project

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### Development Cost /GSF + Proffer

Graph showing the breakdown of development costs per GSF with the addition of proffer potential.
Parking Implications

Parking Required
Type of Parking
Parking Implications

Reduce Parking from 1.5 spaces/unit to 1 space/unit

Development Cost /GSF

- Base: $247/LSF
- Reduce Parking Ratio: $239/LSF

Parking reduced from 16% to 11% of development cost
Proffer potential increases to ~$1,500,000
Parking Implications - *Type of Parking*

Above ground pkg proffer potential increases to ~$1,600,000
Above Ground Parking

- Above ground garage with architectural treatment $22,500 per space, blend of underground and structure is $28,000 per space → $1.3 million in cost savings

- Standard garage would require .58 acres – at $2.2 million per acre worth $1.3 million

- No yield use on expensive land

- Opportunity cost of no future development of the land

- Long term fiscal impact far outweighs short-term proffer gain

- Typically, developers preserve value if possible
Parking & Height: 5-stories of residential built on an above grade garage - 8 story project

Development Cost /GSF

Generally, over 5 stories triggers higher construction costs (steel)
If site costs are $1,500,000 /acre, not $300,000, developer costs too high for supportable rent.
Other Factors That Impact Cost

- Interest rates on financing
- Costs of materials like steel, cement, wood

*Developer does not control these costs*
Summary

• Slight changes in development costs and rent impact proffer potential.

• Developers assume high risk with potentially high rewards. Some factors they control, others they do not.

• Building type and parking are the major cost categories.

• Site costs are highly variable.
Metro Impact

Overview
Scenario Assumptions
Proffer Implications
Metro Impact Overview: Literature

Dallas DART LRT on Taxable Property Values (1997-2001)
- median values of residential property increased by 32% ¼ mile from DART station vs 19% outside
- median value of office 25% near station vs 12% outside
- negligible impact on retail value

Santa Clara, CA (2001)
- Value for commercial properties within walking distance of commuter rail increased by 23%, even higher in CBD locations

San Diego County Rail Transit (2002)
- 46% land value increase for condominiums
- 10% to 17% for multifamily housing
- 91% land value increase for Downtown office locations near rail
- 72% increase for office parcels near trolley stations

Washington, DC and Atlanta (2004)
- Avg office rents increased by more than $3.00/sf
- Office vacancy dropped
- Avg building densities higher
- Higher share of regional growth/higher absorption

Transit Presence Impacts:
- Property Value
- Building Density
- Absorption
Metro Impact Overview: Office
Alexandria Office Comps

City Of Alexandria Office Value
(Metro and Non Metro Locations)

- Average Metro Proximate Office Value = $37.70
- Average increase of $9.70 / SF in office value for Metro Proximate Locations

Source: City of Alexandria
Metro Impact Overview: Office

Non-Metro and Metro Submarkets: Asking Rents

Source: Delta Associates (2008)

Delta assumed 8% premium on office rents with Metro.
## Metro Impact Overview: Residential

### Rent Premium for Proximity to Metro

<table>
<thead>
<tr>
<th>Developer</th>
<th>Low</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lincoln Property Co.</td>
<td>5%</td>
<td>10%</td>
</tr>
<tr>
<td>Bozzuto</td>
<td>10%</td>
<td>10%</td>
</tr>
<tr>
<td>Port Apartment Development</td>
<td>7%</td>
<td>8%</td>
</tr>
<tr>
<td>Charles E. Smith</td>
<td>3%</td>
<td>10%</td>
</tr>
<tr>
<td>Confidential</td>
<td>3%</td>
<td>3%</td>
</tr>
<tr>
<td>Trammell Crow Residential</td>
<td>6%</td>
<td>9%</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td>5.7%</td>
<td>8.4%</td>
</tr>
<tr>
<td>Delta Associates Estimate</td>
<td></td>
<td>7%</td>
</tr>
</tbody>
</table>

Source: Delta Associates (2008)
Scenarios
Illustrative Proffer Impacts

Rental Residential
Residential Condominium
Office
## Rental Residential Implications

### Assumptions

<table>
<thead>
<tr>
<th>Character</th>
<th>No Metro</th>
<th>Metro</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Height In Stories</td>
<td>5</td>
<td>12</td>
<td>Greater building density</td>
</tr>
<tr>
<td>Number of Units</td>
<td>155</td>
<td>310</td>
<td></td>
</tr>
<tr>
<td>Parking Spaces /Unit</td>
<td>1.5</td>
<td>1.0</td>
<td>Transit reduces pkg need</td>
</tr>
<tr>
<td>Development Cost</td>
<td>$244-$254</td>
<td>$281-$291</td>
<td>Higher construction cost with high rise construction</td>
</tr>
<tr>
<td>Rent /Mo</td>
<td>$1,900</td>
<td>$2,250</td>
<td>Rents comparable to Carlyle Place, Meridian at Carlyle/Eisenhower</td>
</tr>
</tbody>
</table>
Rental Residential Implications

Proffer Potential

Proffer Potential

Non-Metro  Metro
## Residential Condominium Implications

### Assumptions

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<tbody>
<tr>
<td>Height In Stories</td>
<td>12</td>
<td>12</td>
<td>Opportunity w/ Metro</td>
</tr>
<tr>
<td>Parking Spaces /1,000 sf</td>
<td>1.5</td>
<td>1.0</td>
<td>Transit reduces pkg need</td>
</tr>
<tr>
<td>Development Cost</td>
<td>$288-$298</td>
<td>$276-$286</td>
<td>High rise construction cost</td>
</tr>
<tr>
<td>Price /SF</td>
<td>$430.00</td>
<td>$450.00</td>
<td>7% increase in value w/ Metro</td>
</tr>
<tr>
<td>Parking Price for 0.5 car</td>
<td>$25,000</td>
<td>$0</td>
<td>1 parking space w/ unit price</td>
</tr>
</tbody>
</table>
Residential Condominium Implications

Impacts

Proffer Potential

![Graph showing comparison between Non-Metro and Metro areas for Proffer Potential]
# Office Implications

## Assumptions

<table>
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<tr>
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<tbody>
<tr>
<td>Height In Stories</td>
<td>12</td>
<td>12</td>
<td>High Rise Construction</td>
</tr>
<tr>
<td>Parking Spaces /1,000 sf</td>
<td>2.03</td>
<td>1.66</td>
<td>Transit reduces pkg need</td>
</tr>
<tr>
<td>Development Cost</td>
<td>$329-$338</td>
<td>$304-$312</td>
<td>Lower Metro cost due to pkg reduction</td>
</tr>
<tr>
<td>Rent /Mo</td>
<td>$38.00</td>
<td>$41.00</td>
<td>8% rent premium assumed</td>
</tr>
</tbody>
</table>
Office Implications

Proffer Potential

Proffer Potential

Non-Metro

Metro
Summary: Metro Impacts on Proffer Potential

- Proffer Potential

<table>
<thead>
<tr>
<th>Category</th>
<th>Non-Metro</th>
<th>Metro</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rental Residential</td>
<td>0.10</td>
<td>1.00</td>
</tr>
<tr>
<td>Condo</td>
<td>0.30</td>
<td>0.80</td>
</tr>
<tr>
<td>Office</td>
<td>0.20</td>
<td>1.00</td>
</tr>
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</table>
Notes About Absorption

• Where office may be potentially the most profitable use, the near term market may be for rental residential. Metro may change the market positioning of the site to accelerate office development.

• All other things being equal, absorption (the amount and pace of development) near Metro stations is faster than non-Metro locations.
Conclusions

• Proffer potential is driven by development economics – the potential is limited.

• Small changes in development cost and/or rent can have a significant impact on proffer potential.

• Parking (amount & type) is a major factor impacting proffer potential.

• Metro significantly increases proffer potential by creating market value (higher rents) and reducing development cost (less parking required).