

## **Issues Identified for Discussion and/or Negotiation during the Obey Creek Development Agreement Process:**

The following are recommendations from The Technical Team based upon review of information for the Obey Creek area that occurred during a series of Evaluation Phase meetings with Town Staff, Compass Committee, and Development Team held August 13-15, and October 9-12, 2013. This memorandum combines comments from Dover, Kohl & Partners, Fuss & O'Neill, and Development Concepts Inc.

During the Evaluation Phase process, the Technical Team has observed that the applicant has demonstrated willingness to improve the character and performance of the Obey Creek Development in response to suggestions made by the Technical Team as well as other stakeholders. The applicant's plans and designs have improved substantially as they have evolved during this process.

**Upon review of the applicant's latest plans and designs, the Technical Team hereby recommends that the Obey Creek Site proceed to the Negotiation Phase with the following considerations.**

The following is a compilation of physical design, transportation, civil engineering, affordable / inclusionary housing, fiscal impacts, and phasing issues that the Technical Team recommends potentially including in the Development Agreement ("DA") process. Notations are included where additional information is needed.

These initial thoughts should help to form the basis of further discussions regarding the project. The final requirements for the applicant may be more, or may be less specific than outlined in these initial thoughts.

### **1. Important Urban Design Characteristics:**

The area of Chapel Hill near the Obey Creek site displays two very different growth paradigms.

Much of the development that occurred over the last half century is oriented to the automobile and is very low density, with separated uses and a disconnected street network. Inordinately high levels of traffic congestion are a hallmark of growth following this suburban pattern and this has, in recent years, become all too evident in Chapel Hill.

A different pattern can be seen, however, in adjacent Southern Village and nearby Meadowmont. While these two projects have differences, they share concepts fundamentally critical for walkable neighborhoods. They are well-connected. They feature a robust mix of uses and residential types. Streets are designed not just for the car, but for bikes and pedestrians as well.

A community expectation exists that the Obey Creek development will take its physical design cues from Southern Village and nearby Meadowmont. While the design of the Obey Creek site cannot, by itself, solve the inordinately high levels of traffic congestion caused by its suburban context, it can be a part of the solution rather than a part of the problem. Following is a more detailed look at some of the important characteristics of walkable neighborhoods that should be incorporated into the final design for Obey Creek:

- **An interconnected network of walkable streets** – Streets must connect to allow traffic to circulate and distribute. Severing connectivity leads directly to increases of traffic congestion on the remaining available routes. The congestion resulting from loading traffic onto a sparsely connected street system can greatly increase the need for increasing capacity through road widening, which results in an even less walkable and more auto-oriented environment. Interconnected streets are not just good for cars, they are much better for circulation on foot and by bicycle as well. In order to attract pedestrians to walk down a street segment, the route must feel safe, shaded and interesting.
- **Proper orientation of building fronts and backs** – Streets and other public spaces should be shaped by the fronts of buildings, not the backs. The fronts of buildings should feature doors and windows providing security through “eyes on the street”. Large expanses of blank wall or bare parking garage facing the street must be avoided. Service items such as dumpsters, loading docks and parking lots should be screened from view in mid-block locations. This will need to be a consideration for 15/501 as well as the newly created internal streets.
- **Public open spaces** – Conveniently accessible locations should be set aside and configured as public gathering spaces. These spaces should be comfortably sized and may be in the form of plazas, squares, parks or playgrounds.
- **Mix of uses** – having goods, services and workplaces within close proximity of residences greatly increases the opportunity to reduce vehicular traffic in favor of bicycle and foot.
- **Mix of residential types** – from apartments, to rowhouses, to detached houses; a diversity of residential products is key to serving a varied population.
- **Important sites reserved for civic uses** – Convenient and prominent sites should be reserved for uses that are important to the civic life of the community. Civic uses can include libraries, places of worship, schools and gathering places among others.
- **Artful design** – In the process of achieving the other urban design fundamentals listed above, care should be given to ensuring that the public spaces of the community are beautiful. A beautiful community will be enjoyed and cared for by its inhabitants over the

long term, helping to ensure that the Obey Creek development becomes a resilient and integral part of the Town of Chapel Hill.

**Positive changes to plans and designs that were made by the applicant during the Evaluation Process:**

The Technical Team has observed the applicant make significant improvements to its plans and designs during the Evaluation Phase process to better achieve these important urban design characteristics. These improvements, which should be maintained as the plans proceed through the Negotiation Phase, include:

- Block sizes were strategically reduced in places to create a more permeable and walkable layout.
- 15/501 is now faced by the fronts of buildings which, combined with street trees and wide sidewalks, help to transform 15/501 into a pedestrian-friendly complete street.
- A slow, one-way side access lane with on-street parking is located along a portion of 15/501, which will improve the pedestrian-friendliness of this portion of the corridor and help to make a variety of uses facing the corridor feasible.
- A slow-moving, traffic-calmed street now runs along the edge of the creek, providing a beneficial new route parallel to 15/501 to improve pedestrian, bicycle and vehicular circulation, as well as improved access to the park along the creek.
- Buildings were added above the large format anchor retailer in order to provide a strong, active edge to the square located on the anchor's roof.
- Along the creek, buildings with habitable space were added to line and conceal from view the parking garages, in order to provide a positive face toward the creek.
- Civic plazas overlooking the creek are lined with the fronts of buildings, concealing the view of parking garages.

**2. Onsite Transportation and Mobility:**

- A site plan showing roadway, sidewalk, bicycle, and transit facilities should be included in concert with the land use and site master plan. Onsite and offsite mobility networks and how they connect to offsite and adjacent roadways and facilities should be shown.

*Information needed: Graphical site plan showing internal roadways and sizes, connections to adjacent facilities, and other modal networks such as transit, bicycle, and pedestrian. Development schedule showing types and intensities of proposed uses.*

- Onsite street network should be included in the DA, specifically a palette of recommended cross sections/roadway typologies and a keyed street regulating plan. Street sections should conform to the principles of Complete Streets and include provisions for narrow travel lanes, on street parking (where needed), accommodation for

cyclists (marked bike lanes or sharrows), and streetside elements such as landscape planting strips and sidewalks.

*Information Needed: Proposed street cross sections for onsite roadways, street regulating plan. Suggest using NCDOT Complete Streets Design Guidelines as a starting point for roadway sections, augmented with best practices for sections (alleys and low volume residential streets) that may not be included in the NCDOT guidelines.*

- The DA should include a map showing the proposed bicycle and pedestrian network, including facility types (sidewalks, trails/greenways, bike lanes, and sharrow routes) as well as proposed cross sections/widths for those facilities.
- Any modifications to existing transit routing and/or stops should be shown on a map to be included in the DA. Specific information should be included to show how the existing park and ride lot at Southern Village is to be used for Obey Creek or if a new facility would be provided on Obey Creek property.
- A Traffic Impact Analysis should be performed to correspond to the proposed land use and mobility network plan once it is developed. NCDOT and the Town of Chapel Hill should be consulted to get approval on the methodology, scope, and limits of the TIA. It is recommended that the TIA incorporate the guidelines included in NCHRP 684: Enhancing Internal Trip Capture Estimation for Mixed Use Developments. Additionally, it is recommended that the proximity of Southern Village and the desire for the interaction of the two developments to operate as one “place” be taken into account in the TIA methodology and execution.
- Should the developer want flexibility in modifying approved mix and intensity of land uses proposed, development of a Trip Equivalency Matrix should be included to facilitate “swapping” of uses to a certain threshold (thresholds to be determined during negotiation phase). This matrix should be included as part of the final DA.

*Information Needed: Trip Equivalency Matrix.*

### **3. Onsite Parking:**

- Shared parking should be calculated if the proposed land use includes a mix of uses conducive to shared parking. The proposed methodology for calculating parking needs based on the concept of shared parking should be included in the DA, along with an analysis showing that the proposed parking meets the projected needs.

*Information Needed: shared parking methodology and calculation of number of spaces needed based on the shared parking concept.*

- The DA should include a parking location and space count map, showing number and location of on street spaces per block, number and space count for proposed on street spaces, lots and garages, and proposed location and number of spaces for bicycle parking.

*Information Needed: Parking location and count map.*

- On street parking should be included in the overall space count toward satisfaction of the parking requirements.

*Information Needed: Location and space count for on street spaces; concurrence from Town for inclusion of on street spaces for parking requirements.*

- Parking calculation should utilize best practices for ensuring that the parking supply is “right sized” for the development. To that end, the Town may need to deviate from its current parking requirements to ensure the “right” amount of parking is provided for the mixed use walkable community proposed. Parking ratios and requirements will be negotiated during Phase 2 of the DA process.

*Information Needed: Parking calculation including any proposed parking space requirements that differ from currently-approved Town requirements.*

#### **4. Offsite Transportation and Mobility:**

- Proposed offsite improvements should be depicted on a map and details such as proposed turn lanes, signals, modified intersection configuration, and cross sections should be included in the DA. The DA should also include the results of the traffic impact analysis and any proposed and agreed upon mitigation enhancements, along with funding responsibility for each proposed mitigation project.

*Information Needed: Traffic Impact Analysis Report (TIA) along with concurrence by Town and NCDOT; concurrence from NCDOT on any proposed access point and new traffic control devices (TIA should include queuing analysis and signal warrant analysis for proposed signal on US 15/501 to facilitate this discussion).*

- A proposed scheme for getting pedestrians and cyclists as well as vehicles across US 15/501 should be outlined, including intersection locations and control (stop, signal, or roundabout) as well as any recommended cross sectional modifications proposed for US 15/501 to change the character to something more compatible with the proposed urban character of the Obey Creek frontage as well as the existing character of Southern Village. It is also anticipated that this area should serve as a Southern Gateway for the Town of Chapel Hill. NCDOT Complete Street Design Guidelines can be used for a

basis for the corridor recommendations for US 15/501 (possibly multi-way boulevard section?).

*Information needed: Illustrative plan and section for US 15/501 including proposed frontage type, lane widths and number of lanes, intersection and crosswalk configurations, and streetscape and gateway elements.*

- Linkages to regional greenway, trail, bike lane, and sidewalk systems should be depicted on a map to be included in the DA. This will support the proposed trip reduction per the TIA methodology.
- Any proposed modification to existing transit routes and stops and any new proposed service or stops should be included in the DA.

*Information Needed: Concurrence from Chapel Hill Transit on any proposed route or stop modifications, or modification or replacement of current Southern Village Park and Ride facility.*

## **5. Stormwater Management and Green Infrastructure:**

- The soil conditions (types, depths, permeability, erodibility, etc.) and bedrock conditions should be evaluated to determine the constraints on development and suitability for low impact design/infiltration for the stormwater management system.

*Information needed: Soil testing and investigation of site.*

- Stormwater planning can be done in a stepwise fashion as the development plans are refined. The first step might be a stormwater master plan which clearly defines the requirements and goals of the system and estimates the runoff volume increases related to the proposed changes in impervious surfaces (based on approximate coverage areas as the program is developed) and provides concepts and evaluates potential effectiveness given the specific site conditions. This conceptual plan should also include proposed methods to meet the quality requirements.

*Information needed: Clear definition of the requirements and goals of the project (related to stormwater quality and quantity treatment) and conceptual plan for meeting same.*

- The pre-construction and post-construction stormwater runoff should be modeled in order to demonstrate compliance with Town and State requirements, including both quantity and quality standards. Specifically, the applicant should provide concepts for how it will meet the quality requirements (e.g. removal of at least 85% of particulate

matter) and quantity (e.g. no increase in peak discharge rate or total volume of discharge related to the design storm event).

*Information needed: Estimated runoff volume increases within each area of the proposed development and potential methods to address changes. If the conceptual stormwater master plan includes multiple options for meeting the goals and objectives, then more detailed modeling could be deferred until the second phase of the DA process.*

- More detailed analysis and a phasing plan that demonstrates how all quality and quantity goals will be met during each phase of the construction should be included in the DA.
- The final design of the treatment measures should be deferred until the final design plans are prepared. At this time, Town Staff should be given the administrative review/approval authority based on compliance with the approved stormwater master plan requirements and goals agreed in the DA.

#### **6. Public Utilities:**

- The adequacy and availability of public utilities serving the site should be demonstrated and documented. These should include water supply (including both domestic and fire protection uses), sanitary sewer, electrical, communications, and natural gas (if proposed).

*Information needed: "Will Serve" letters from the utility providers stating that they are aware of the scope of the proposed development and can meet the associated utility demand loads.*

#### **7. Environmental Resources:**

- The function and value of Obey Creek, wetlands and the surrounding upland habitat should be studied so that a base line pre-development condition can be defined.

*Information needed: wetlands, biological study, and function and value assessment of jurisdictional wetland areas.*

- The potential impacts (both temporary construction related and long term operational concerns) should be identified, and addressed. The concepts must adequately define specific methods that will be used to protect the viability of the environmental resources in a sustainable manner as an integrated part of the development plan.

- Any planned areas to be used for passive or active recreation should be identified and potential impacts should be identified and addressed. Any mitigation, enhancement, or maintenance functions should be identified.
- The presence of any species of concern (State or Federal listings) should be identified. If suitable habitat for any species of concern has been previously identified, or is anticipated, studies should be conducted to determine whether the species is present. These comments apply to both flora and fauna. A search of the North Carolina Natural Heritage Database should be included.

## **8. Affordable Housing**

### **Existing Conditions / Issues:**

- A significant need exists for housing that is affordable for people between 30-150% of Area Median Income, for both for-sale and rental units.
- The Town is largely built out, leaving development on the very limited number of undeveloped parcels, and redevelopment, as the primary methods to provide increased housing affordability.
- Strong market demand and the high costs of redevelopment mean higher prices for raw land to develop for affordable housing.
- The Town's existing inclusionary zoning ordinance only addresses for-sale housing, with no existing tool for rental housing.

### **Considerations for Town Council / Compass Committee:**

- "Affordable" or "Workforce" Housing can mean many different things. Chapel Hill is striving to create housing affordability for a wide range of households. To avoid confusion, it can be helpful to stick more closely to HUD guidelines, since many funding sources line-up with these definitions:
  - "Affordable" Housing = 30-80% of Area Median Income. Programs like HOME, CDBG and LIHTC are available to help provide affordable housing, though LIHTC doesn't provide funding for units above 60%.
  - "Workforce" Housing is geographically dependent, with no precise definition. However, it is often defined as 80-120% of AMI, and can go down to 60%



depending on local affordable housing policies. No established state or federal dollars are available for anything above 80% of AMI.

- Anything above 110-120% of AMI is typically considered “market-rate”, though this can differ by community. Analysis shows a cost-burden for for-sale units going up to as high as 150% of AMI, so this range could also be considered “workforce” housing for Chapel Hill.
- Whether a unit of housing is considered workforce vs. market-rate often differs depending on whether it is rental vs. for-sale. There is also a difference between newly constructed units and existing units, particularly in the rental housing market. The following are suggested rough estimates:
  - For Rental: Affordable = <60% AMI, Workforce = 60-90% and Market-Rate = 90%+ of AMI
  - For Sale (SF Home): Affordable = <90%, Workforce = 90-150%, and Market Rate = 150%+
  - For Sale (Condo): Affordable = <60%, Workforce = 60-100%, and Market Rate = 80%+
- The provision of affordable/workforce housing can occur in two ways – homogenous individual projects (i.e. all or most units in a building are affordable) or mixed-income (affordable units are integrated with market-rate units in single project). The logistics of providing affordable housing differ with each approach, so if there is a preference for one over the other, there is a need to consider how policy impacts that direction.
- Available rates for rental units technically don't show a cost burden similar to that in the for-sale market, but there is definitely a lack of supply for units in certain price ranges that include affordable and workforce housing.
- The 50-55% AMI income category is typically the tipping point between rental vs. for-sale for low-income households. Supplying for-sale, affordable product to households below 60% AMI typically requires the most subsidy and risk for a lender / grantee. Strategies that require provision of for-sale units below the 55-60% threshold should be thought-through carefully. Subsidization will most likely be needed in order to provide these units.
- There are essentially three ways to generate affordable housing: (1) Subsidy from the public sector; (2) Strong enough demand in the housing marketplace, allowing a developer to generate enough income from market-rate units to balance any affordably priced units (this is the ideal scenario for inclusionary zoning); or (3) Allowances of

increased density for a project that allow more market-rate units to counter-balance a mix of affordable units.

- Affordable housing prices – especially at 30-80% of AMI – largely cannot cover construction costs, thus creating inherent gaps in a project. This range will go much higher – perhaps up to 150% of AMI – if a project is built at higher densities, due to the need for steel construction and structured parking, which add significantly to construction cost.
- Chapel Hill has been lucky enough in the past – and may continue to be in the future – to experience sufficient market demand to allow developers to accommodate the request for inclusion of affordable housing, without overly burdening the economics of their project. This is atypical in most communities around the country. Careful consideration should be given to the income level requirements of affordable housing that the Town may want the Obey Creek development to accommodate. The lower the income rate, the harder to balance with revenue from market-rate units. The desire for units at the 60% AMI level or lower should include strategies to leverage funding sources to help the developer successfully provide those units without hurting development economics. Most rental units at this income level built around the country are delivered through HUD or LIHTC subsidy.
- One strategy is to integrate funding (HOME, CDBG, etc.) into a project in order to preserve affordability for units within a building (the same strategy the Home Trust uses to generate affordable for-sale units). Another is to plan for and allow a separate income restricted property that can be eligible for tax credits or other federal funding. A third is to utilize county Section 8 vouchers, transferring some into “project based” vouchers that preserve affordability for very low income families for certain units within a particular building / project.

## **9. Commercial for Tax Base Impacts**

### **Existing Conditions / Issues:**

- The Town of Chapel Hill is more heavily reliant upon residential property taxes (~84%) as a percentage of its budget than other large Triangle communities.
- Existing residential property taxes are the highest in the Triangle (and at the top in the state of North Carolina).
- The increase in commercial tax base has been a central goal of Town economic development efforts for the past several years.

- The Town of Chapel Hill and environs is largely underserved by retail – especially regional retail – which traditionally has been supplied in Durham but which is starting to move more directly into the local market to serve the growth in Orange and Chatham Counties.
- Northern Chatham County is one of the fastest growing areas of the Durham-Chapel Hill Metropolitan Area (MSA), and the county as a whole is significant underserved by retail in daily goods, dining and leisure goods.
- The Obey Creek site sits in a perfect location to capture significant retail demand from both southern and western Orange County (Chapel Hill and Carrboro) and northern Chatham County.

#### **Considerations for Town Council / Compass Committee:**

- Given the latent demand for retail (up to 1 million square feet by 2020) in Orange and Chatham counties, retail development offers tangible and immediate potential to help Chapel Hill enhance its commercial tax base. Apart from the NE quadrant (the Ephesus Church/Fordham Boulevard Area), the area most underserved by retail (and thus the most likely to draw retailers and shopping center development) is in southern Chapel Hill / Chatham County.
- The growth of northern Chatham County ensures ongoing demand for retail in the southern Chapel Hill area. It is highly likely that retail will seek locations in this area even if additional retail goes into the NE quadrant, because it can serve a large and growing market more easily.
- Retail development will have the choice of two jurisdictions in this area – Chapel Hill and Chatham County. At the moment, Chapel Hill is a preferred location due to proximity to Chapel Hill's name, income, available utilities, and density, but Chatham County can just as easily serve the same market. If retail development were unable to locate in southern Chapel Hill, the Town would risk losing retail businesses and tax base to Chatham County. The recent construction of a Wal-Mart demonstrates retail demand and the potential loss for Chapel Hill if land is not made available to capture new retail.
- "Retail" in this case can mean anything from small-scale shops (East 54, Meadowmont) to a community shopping center anchored by a grocer or major retailer (Harris Teeter, Wal-Mart, Target, etc.). While the access and exposure to the site could create feasibility for an unanchored center similar to East 54, Obey Creek offers the only real opportunity to capture a grocery/major retailer in the Southern part of the Town. It will be this type of business that generates the greatest amount of commercial tax base.
- Furthermore, the construction of an unanchored retail center is inherently risky and may jeopardize the Town's dual goals of generating tax revenue and having businesses that

can better serve the needs of nearby residents, as well as complement /enhance the Southern Village commercial center.

- Retail demand is so significant at this location, that national and regional “box” retailers, grocers, and other businesses that traditionally have auto-oriented layouts would most likely be willing to adapt into a more urban, pedestrian-oriented format in order to be at this location. This should mitigate concern over ending up with a conventional shopping center like New Hope Commons, Southpoint, or even Patterson Place. Good local examples include the Walgreens at Franklin and Estes Drive, and the Harris Teeter / Target at North Hills, in Raleigh.

#### **10. Project Phasing / Development Program Flexibility**

##### **Existing Conditions / Issues:**

- The period of time covered by a development agreement is long – up to 20 years. This length of time would typically cover at least two, if not three market cycles.
- Demand for different markets (rental housing, for-sale housing, retail, office, hospitality, etc.) will shift over this time period, perhaps enough to make one market much less desirable than before.
- Changes in business practices, lifestyles, etc. will likely shift over a 20 year period.

##### **Considerations for Town Council / Compass Committee:**

- The use of the development agreement or a similar tool to guide the build-out of a master planned, mixed-use project has become more and more common throughout the country. Some agreements include a sharing of investment (i.e. municipality pays for infrastructure, developer pays for buildings/sites), and others are focused more on establishing long term land controls/entitlements. As this process becomes more common, so is a level of consternation and conflict between the communities and master developers when a proposed development appears (or is outright) different from what was originally proposed in the original master plan.
- Attempts by a master developer to take advantage of short-term strong markets that may differ from original plans, even if they keep to the spirit of the original plan, can cause conflict. This is often because not enough flexibility was built into the development agreement in the first place.
- It is common for a developer to be required to provide a very prescriptive master plan in order to gain approval for public sector investment and/or entitlements. The problem with this is if it is a long-term development plan, shifts in market forces often make it

difficult to build the development as originally envisioned. If controls are too tight, then development may become difficult or impossible to proceed. This is a poor scenario for a developer, but also for a community, which could end up with a half-finished or foreclosed property that may sit vacant or unfinished for a long time.

- Long-term development agreements, whether in strong or weak market areas, should anticipate shifts in markets that may prevent easy development of certain components. Communities and developers should work together to discuss what uses are acceptable and what are not. For example, a shift from plans to build condominiums to building apartments may be acceptable, but a shift from a plan to build market-rate apartments to affordable rental units may not be acceptable.
- Developers want confidence and predictability that they will be able to monetize their land under most circumstances (save a major recession) while the community will want assurances that changes in the original plan are not too radical. This balance of need and flexibility written into a development agreement will help sustain a public-private sector relationship over the period the agreement covers.

**Addendum A – Transportation Best Practice Considerations for Improving the Character of Route 15/501, as well as other streets in Obey Creek:**

Transportation Notes from Work Session: August 10, 2013

The overriding question is “do we think this area is a place?” If so, then the context along 15/501 should change from a suburban highway to a more urban corridor where connectivity along and across is important not only for cars but also for people, whether they’re in cars, in buses, on bikes, or on foot. To achieve the contextual consistency with the vision of this as a place, 15/501 needs to be treated in a different manner. This direction can be achieved using NCDOT’s Complete Streets Design Guidelines, considering the use of the Urban/Suburban Boulevard section, which provides an access lane along the current 4 lanes in. (boulevard image from Octavia Boulevard)



Also, if we think of this context as different from what it currently is today, the palette of traffic “mitigations” is different from what might be considered in a conventional suburban single-use development proposal. Rather than focus solely on road widenings and addition of turn lanes at intersections, a broader palette of solutions is possible simply due to the larger scale of the project, and it is required to be consistent with the overall vision and context of Obey Creek and Southern Village taken as one place, the Southern Gateway of Chapel Hill. The palette extends to measures more consistent with town-building such as constructing alternate and interconnected street network; interconnected pedestrian facilities; small, low speed internal streets that serve as

places for movement of all modes and parking; an interconnected system to accommodate and encourage walking and biking; and safe connections across 15/501 to the park and ride and Southern Village.

Internal streets should be characterized by one travel lane in each direction with on street parallel parking (typical section sketch drawn yesterday). Sharrow should be used to denote shared space with bicycles and target speed on internal streets should be in the range of 15-20 mph. Sidewalks should be minimum of 16' if outdoor cafes are proposed.

**Bad Practices:**

- Ignoring context when defining street character
- Allowing traffic mitigation to exacerbate existing or create new barriers
- Focus on Level of Service for cars as the only metric

**Good practices:**

- Let context drive street design, not the other way around
- Create route choices through network
- Create true mode choice by providing facilities for walking, biking, and transit
- Think of internal streets as no wider than necessary to provide complete modal mobility
- Share parking; provide choices in product (on street and garages)
- Solve traffic issues using full palette of multi-modal solutions
- Humanize the big road by defining section that will “pull” the two sides closer.
- Leverage the success of transit within this area of Chapel Hill

# Tradeoffs in Development Negotiations – A Quantitative Analysis

## Proposed Obey Creek Development

Town of Chapel Hill, North Carolina

Development Concepts, Inc.

**Note:** *This white paper is intended to be a guide to the analysis presented in the PowerPoint presentation: "Tradeoffs in Development Negotiations" prepared by Development Concepts, Inc.*

### 1. Objective of Analysis

Create a conceptual, example development project similar to the proposed Obey Creek development in south Chapel Hill to illustrate how certain cost additions impact a project's ability to be viable and attract investment.

### 2. Overview

Real estate development in strong regulatory environments can be a difficult and exasperating process for both public and private sector participants. The very nature of extensive regulatory requirements in a municipality is the expectation of planners, politicians and citizens that development projects meet certain standards, inclusive of construction quality, design standards, infrastructure, road quality, and programming goals like affordable housing – all of which add cost to a project. These standards often preclude development in weak market areas, but developers are willing to accommodate such standards (as well as a long entitlement process) in strong market areas because of the revenue potential and access to capital. However, even in strong market areas like Chapel Hill, excessive standards and expectations can still adversely impact a project if the market cannot bear those additions, or there is not enough flexibility for the developer to adjust for the additional costs.

This is where the development negotiation process can lead to frustration and mistrust. Developers may get frustrated with a process that has excessive standards, or one that adds standards on top of the base expectations, adding time and money. On the other side, cities can get frustrated when they make requests of the project that are tied to quality of life improvements, economic development, and fiscal responsibility, only to hear from a developer that the project cannot support such requests. Without knowing the financial analysis behind the project, the assumption is that the developer is being difficult and simply protecting their profits at the expense of community concerns.

In many situations this is true, but there are others where requests of the development really do impact its feasibility. Therefore, it is important to understand the trade-offs behind development standards and additional requests from the developer negotiation process so that the process can be most successful. This paper summarizes an analysis that was performed to help non-developers understand the potential impacts of certain requests on the proposed Obey Creek development.



### 3. Methodology

To show the impacts of cost additions to projects, an example development project was created. The project is designed to be as similar to the proposed Obey Creek development as possible without actually re-creating the project parameters, since precise costs and other inputs to the development pro forma are unknown.

*Disclaimer: It is important to understand that the results from this analysis are meant to be relative to the Obey Creek project, but are not to be mistaken for the precise circumstances surrounding the project. The analysis attempts to incorporate as much local market data and construction criteria as possible, but does not reflect the actual costs and revenue targets of Obey Creek.*

The example project is located on 20 developable acres, though the total project site is 60 acres, leaving 40 acres preserved as conservation area. It is designed to be a compact, mixed-use development on a site adjacent to a major arterial and with topographical challenges that increase site work costs. Similar to Obey Creek, the project is designed as a mixed-use town center, served primarily with structured parking and with a residential/retail/office mix that encourages an urban environment for residents with access to retail/dining and entertainment through the retail center. Like Obey Creek, the markets for housing and retail are stronger than office, and therefore more square footage is allocated to those uses. For simplification, no hotel program was included in this analysis.

### 4. Development Assumptions for Example Project

Large scale, multi-phase developments projects are inherently complex and can include a wide variety of methods to divide land. Master developers may choose to prepare and sell development pads to other developers, they may choose to develop and own on their own, or they may develop and sell buildings to investors, among other options. To simplify the analysis, the pro forma for the example project assumes the entire 20 acres is developed and operated for at least 10 years by the master developer. This allows for a streamlined stabilized income analysis to gauge overall feasibility. While actual approach will likely differ for Obey Creek, this method remains a relatively accurate method to determine feasibility since so much of the development program and design will be pre-determined. For example, if the master developer were to sell a prepared piece of land to another developer, there is not a lot of leeway to what the developer will be able to build – the general parameters of that site will be pre-determined by the development agreement, with some leeway in terms of market flexibility. The deal to convey the land and the price for that land to a builder/developer will therefore be based on the same feasibility indicators included in this analysis.

### 5. Evaluation Criteria

Many unfamiliar with development pro formas may assume that financial calculations are always geared towards maximizing profit. While this is true for pure real estate investment deals, real estate developers must balance a number of different indicators and objectives related to multiple investors, from banks to equity investors, to their own investment in time and money. The example project was created so that it met a number of different investment indicators. These indicators form the core of this analysis, as they essentially dictate whether a development project is feasible or not. A listing and description of the relevance of these indicators is below:

**Debt Coverage Ratio** – “DCR” is the core indicator of an income producing property in which bank financing is used. True to its name, it measures the amount of revenue available to cover debt service, or

payment. Lending institutions require revenue to be higher than debt service in order for there to be enough cash to still cover debt payments if there is unusually high vacancy, maintenance, or other expenses. A **ratio of 1.25** represents a typical minimum DCR that banks will accept, and is the indicator used in this analysis.

**Cash on Cash Return** – Cash on cash return measures the return of annual cash flow against the equity put into the project. This indicator can be a developer's indicator, if they are the ones that put the equity up to secure private financing. It can also be a measure through which an equity investor measures the project's ability to make payments to the investor. In a project the scale of the example project, or Obey Creek, banks are not necessarily the only investors. Few developers have the financial capacity to invest the equity required to secure financing on their own. In order to help finance the project, a developer may turn to equity investors. How equity investors are paid varies by project, but many situations involve part of the return of principal and profit through annual cash flow. This is what cash on cash return measures. A good return is 8-10%, though this analysis uses an **indicator of 7%**, representing a conservative return based in part on the capitalization rate (see below).

**Value or Income based Analysis** – Another way to measure financial feasibility is to use what is called a value based analysis, which compares a project's cost against its estimated value. This is used to estimate the ability of a developer to sell a project to an investor once a stabilized income stream is established. Project sale can also be used to pay back equity investors. Whether a developer chooses to sell or hold onto the project, this is a helpful indicator to evaluate feasibility. If the value is below the cost, then the project will likely be perceived as infeasible to an investor. Any value above cost is good. Value is estimated by dividing net operating income by a "cap rate", which is a measure of return on investment. Market based cap rates for the Raleigh-Durham region were found to range between 5-7% depending on the use. Using available real estate data, a blended cap rate of 5.92% was used for this analysis.

**Developer Fee & Overhead** – There are several ways for a developer to gain return on a project like Obey Creek. For the example project, it is assumed that there is an outside equity investor in land (like Obey Creek) and an equity investor for financing. This leaves developer fee as the primary source for return. Developer fee is calculated a number of ways, but essentially reflects the amount of risk, time, and money put into the project by the developer. Fees are often found in the 10-20% range of the total project, with a low rate of 10% only being feasible if there was very little risk or if the developer can gain profit from another source like cash flow. Based on the complexity and time required to negotiate and entitle the Obey Creek project, it was determined that a rate for fee & overhead of **15%** was conservative indicator to be used.

Another evaluation factor that was used was the qualitative goal of created a true – mixed-use center that incorporates residential, office and retail uses in a manner that not only creates a compelling place, but also which ensures a synergy and supports the success of all uses. Examples include the inclusion of retail offerings that appeal to potential residents and a residential or office density that can help support those retail uses.

## 6. Example Project

Using the investment and physical criteria discussed in above, the example project was created in a spreadsheet. This project was used as the "baseline" to conduct scenario analysis and met all four of the previously discussed financial indicators.

Components of the project include (see slide 12)

- 20 Acres - 16 acres of build-out to accommodate roads and infrastructure
- 956,000 net square feet of space
- 592 housing units (37 du/acre)
- 59 (10%) units priced below market for workforce housing
- 353,000 gla of retail (2 anchors, 2 junior anchors, storefront retail)
- 160,000 nsf of office space
- 2,450 parking spaces, 53% of which are underground parking, the remainder vertically structured parking.
- Floor to area ratio (FAR) of 1.36
- Total project cost of \$242 million.

## 7. Scenario Analysis

### Scenario #1 (slide 13)

Description: The first scenario evaluates the impact of adding \$200,000 per acre in infrastructure costs. These costs could encompass a number of items, from off-site roadway improvements, top grade utility or stormwater infrastructure, bike lanes, open space provision, etc.

Results: When applied to the base scenario, the additional infrastructure cost reduces the DCR by 1.5%, the cash on cash return by 10%, and the value remains above cost. For a developer, there are a number of ways to adjust for these additional costs, which are listed on slide 13. It should be noted however, that while these impacts seem minimal, they are applied to the entire \$242 million project. Infrastructure investments are often applied upfront, before an entire project of this scale is built-out. If one assumes that the \$200k/acre is needed in the initial build-out, and that the first phase of the project is only one-third of the total build-out, then the additional cost becomes an increasingly large burden. The estimated DCR falls by 6%, well-below financeable levels, and the cash on cash return falls to 30%. The smaller the first phase, the greater impact of the upfront costs on its feasibility.

### Scenario #2 (slide 15)

Description: The second scenario requires the project to assume a greater burden of affordable housing. 20% of total units are to be priced for workforce households (an increase of 10%) and another 20% are to be priced below 50% AMI (an increase from 0%).

Results: When applied to the base scenario, the DCR falls 6% below financeable levels, CoC falls 30% to 5%, and value remains above cost. This would create a deal that is not feasible for either bank financing or private equity, and it would take significant changes, such as adding significant amounts of retail and office space, reducing the percentage of underground parking, or charging more for retail storefront space, all of which have consequences like adding density, creating a larger retail center, and reducing the ability to offer space to local businesses.

It should be noted here that value remains above cost for many scenarios because the cap rate of 5.92% is so low, which raises value. This seems counter-intuitive, as one would typically prefer a higher return on

their dollars and therefore a higher cap rate. In this case, the cap rate is used for investment purposes. While ultimately a higher cap rate / return on investment would be preferable to an investor, it also is an indicator of higher risk. Lower cap rates, while generating relatively less return, reflect much safer investments, and therefore are more attractive to institutional investors. If such a high proportion of affordable housing were included in the residential component, that would likely increase the cap rate to a level where value is below cost, and less attractive to investors.

### **Scenario #3 (slide 16)**

Description: The third scenario examines the impact of reducing the density of the example project by half. This takes the project from an FAR of 1.36 to 0.70. To accommodate, construction costs were reduced based on the ability to build more with wood frame construction vs. steel and site preparation costs were also reduced to reflect less structured parking.

Results: In order to retain the qualities of a mixed-use center, the reduced project results in 395 units (25 du/acre) and 150,000 square feet of retail, still enough for a small anchored center. Office is removed entirely due to lack of developable space. This outcome results in a significant drop in DCR (-13%), Cash on Cash (down to 3%) and the value goes below cost. Essentially, the cost of land and site preparation preclude the ability of a developer to build a viable project with town center principles.

It should be noted that for the example project, there are two potential outcomes that would reach financial feasibility. One is to build primarily retail (over 600,000 square feet) with a small single family residential component. The second would be to build only apartments. In both these outcomes, all structured parking would have to transition to surface parking to reduce the cost. Based on the evaluation criterion of creating an urban mixed-use center, this clearly moves away from the goal of a town center to a traditionally suburban development pattern.

### **Scenario #4 (slide 17)**

Description: The final scenario combines all three requests of the example development project – additional infrastructure, affordable housing, and reduction in density.

Results: The combination of all three additions result in negative cash flow. Whereas the previous additions taken individually reduce cash flow somewhat, it still remains positive with value above cost. The combination takes the DCR and Cash on Cash indicators negative, meaning negative cash generation. Value also reduces below cost. The project is completely infeasible and would need drastic re-structuring to reach financeable / investment levels.

# Tradeoffs in Development Negotiations

Proposed Obey Creek Development  
Chapel Hill, North Carolina

Development Concepts, Inc.  
November, 2013

## purpose

1

Assist citizens, non-developers and planners understand the tradeoffs and financial impacts on development projects when requesting the integration of community-based objectives

## approach

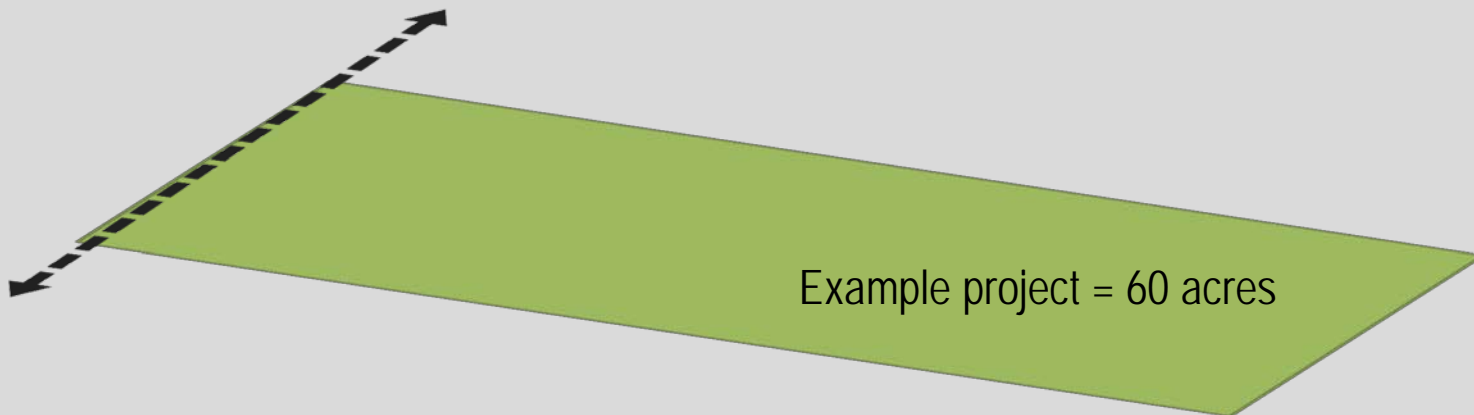
2

- Create example development project similar – but not the same – as the proposed Obey Creek development in south Chapel Hill;
- Using market data based on local conditions, simulate a mixed-use development project of similar scale to Obey Creek;
- Apply three different scenarios to understand financial impacts on project.

# example project

3

- Large, greenfield property on major arterial

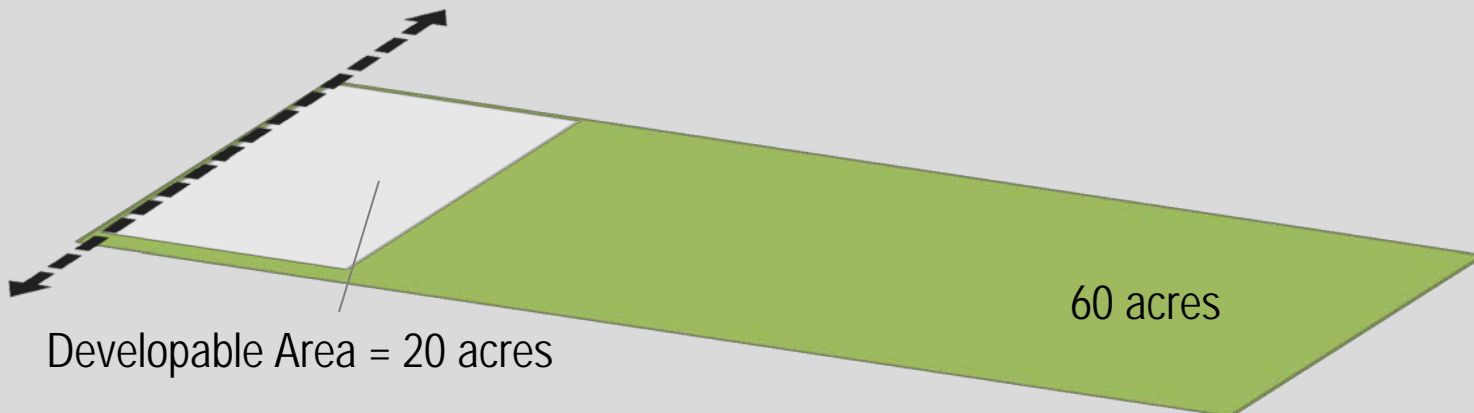




# example project

4

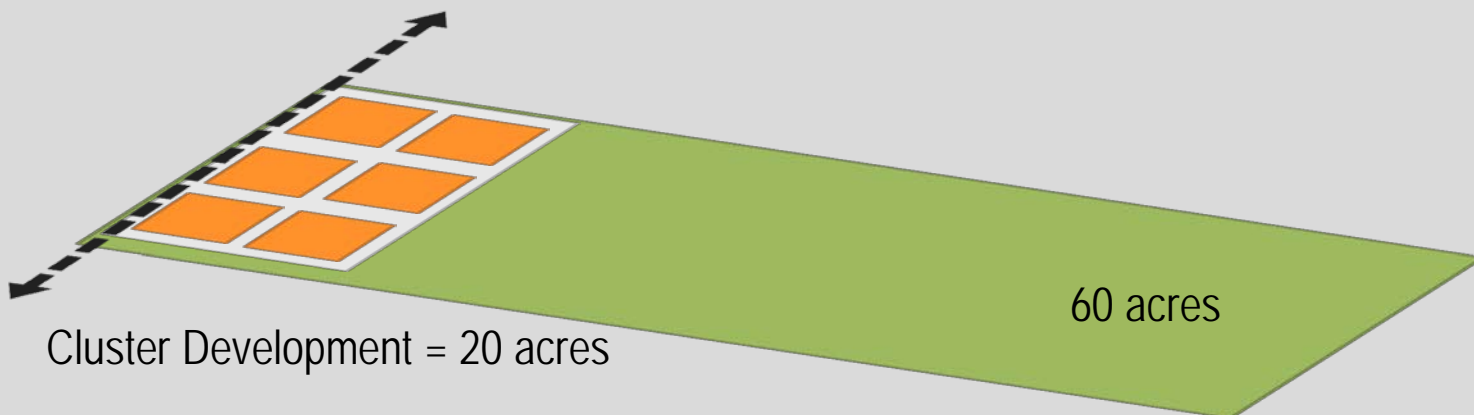
- Large, greenfield property on major arterial
- Clustered development in small section of overall property to accommodate provision of open space and site topography



# example project

5

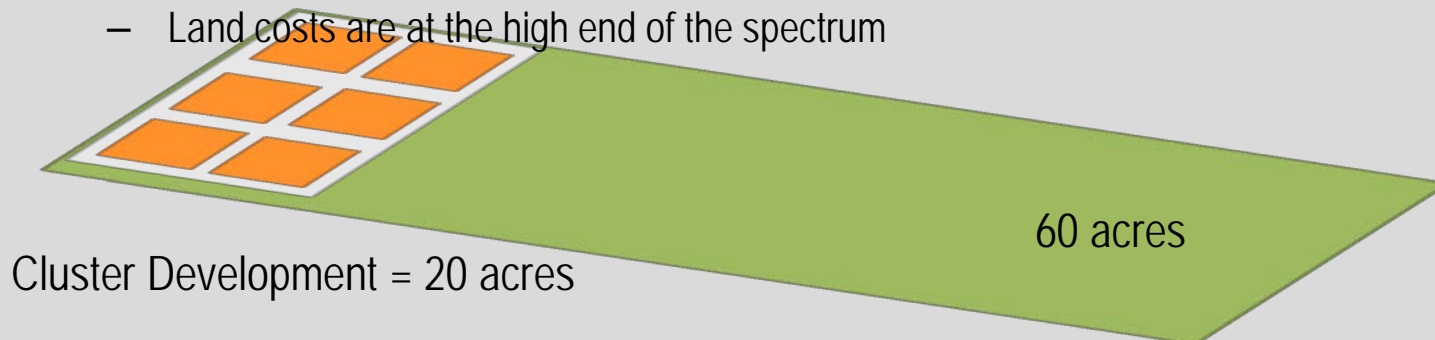
- Large, greenfield property on major arterial
- Clustered development in small section of overall property to accommodate provision of open space and site topography
- Mixed use, town center type development integrating retail, office and multi-family housing



# example project

6

- Large, greenfield property
- Clustered development in small section of overall property to accommodate provision of open space and site topography
- Mixed use, town center type development integrating retail, office and multi-family housing
- Other criteria:
  - Site topography increases cost of infrastructure
  - Project is served primarily by structured parking (vertical & underground)
  - Strong demand for multi-family and retail, slightly less strong for office
  - Project's base scenario reserves 20% of housing units for workforce housing
  - Land costs are at the high end of the spectrum



# assumptions for analysis

7

- Development projects of this scale can take on numerous options and complexities, such as whether master developer is a land developer (sells all land), partial developer (sells some land, develops other parcels) or is the primary developer.
- To make this analysis easier to create, the land sale scenario is removed, meaning that master developer is primary developer that will hold on to the property for at least 10 years. Cash flow analysis is primary method of analysis.
- This scenario models a different approach than Obey Creek, but this approach still addresses feasibility of each component of the project. Feasibility of the project and each of its components is necessary regardless of land developer or primary developer approach.
- Analysis uses no subsidy (80/20 debt vs. equity for private financing)

- Details of development projects vary based on a number of factors – timing, variations in market cycle, the national economy, financial capacity of the developer, investor and bank criteria, etc.
  - Construction costs
  - Lease rates
  - Financing rates
  - Investor ROI
  - A/E costs
  - Taxes
  - Vacancy
- This model – as to all development pro forma – represents a “point in time”. Important factors for consideration are the “magnitude” of impact from additional costs

# baseline scenario

9

- To create the baseline scenario for analysis, the following measures of “success” dictate mix, scale, and characteristics of project:
- QUANTITATIVE– measures dictated by the real estate development world.
  - Debt Coverage Ratio (DCR)
    - ratio indicating cash flow of project is enough to support debt and additional amount
    - Required by banks
    - **minimum 1.25**
  - Value vs. Cost
    - comparison of total project cost to project value, determined by a capitalization rate
    - Shows value to investors
    - **Value must be equal to or above cost**
  - Cash on Cash Return
    - Return on equity investment to secure debt funding
    - **At least 7%**
  - Developer Fee
    - Return earned from level of time and risk put into the project
    - **Minimum of 15%**

# baseline scenario

10

- To create the baseline scenario for analysis, the following measures of “success” dictate mix, scale, and characteristics of project:
- QUALITATIVE – measures to create desirable and feasible urban center
  - Retail – accommodate enough square footage to be sustainable as an amenity for housing/office and to appeal to investors
  - Housing – accomplish densities (du/acre) to support storefront retail / in-line spaces and mixed-use, urban environment to draw target markets
  - Parking – underground and interior structured spaces provides virtually all parking for project, allowing other land uses to define project environment

# baseline scenario

11

- Following all of these criteria, an example project was able to be created as a baseline scenario.
- 20 acres (16 acres of build out)
- 956,000 sq. ft. (net)
  - 592 housing units (37 du/acre)
  - 59 (10%) units priced below market for workforce housing
  - 353,000 gla retail (2 anchors, 2 junior anchors, storefront / inline space)
  - 160,000 nsf office
  - 2,450 parking spaces (53% underground)
  - FAR of 1.36
  - Total project cost: \$242 million



# scenario 1 – offsite infrastructure

12

- Assume that \$200,000 / acre in cost is added to the project
  - Added costs could include open space, bike lanes, transportation improvements, stormwater improvements, etc.
- Results
  - DCR falls by 1.5%
  - Cash on Cash falls by 10%
  - Value remains above cost
- Remedies (w/o subsidy)
  - Scenario increases cost without ability to raise income
  - Raise leases on affordably priced units
  - Increase in retail square footage (increases density)
  - Increase in office square footage (increases density)
  - Charge more for storefront retail space (reducing availability to offer to small businesses)
  - Reallocate underground parking to structured – (increases density / partial improvement)

## scenario 1a – offsite infrastructure (phasing)

13

- Added infrastructure costs can have greater impact if a project is phased.
  - Assume an initial phase 1/3<sup>rd</sup> the size of total (~290,000 sf focused mainly on retail and housing)
  - Assume most of the added infrastructure cost (75%) needs to be completed and financed as part of first phase.
- Impacts:
  - DCR falls by 6%, below financeable threshold
  - Cash on cash reduces by 30% - difficult to draw short-term investors
- The smaller the project, the more upfront infrastructure adds will impact the project – market will drive size of phasing

# scenario 2 – affordable housing

14

- 40% of units are allocated at below market rate
  - 20% (118 units) are “workforce” housing – 80-100% AMI
  - 20% (118 units) priced below 50% AMI
- Results
  - DCR falls to 1.18 (6% drop)
  - Cash on Cash = 5.0% (30% drop)
  - Value remains above cost
- Remedies (w/o subsidy)
  - Increase retail/office square footage (increases density)
  - Utilize more above grade structured parking (increases density/partial increase)
  - Charge more common area maintenance (partial increase)
  - Charge more for storefront retail space (reducing availability to offer to small businesses)

# scenario 3 – reduction in density

15

- FAR is cut by half
  - FAR = 0.70
  - Construction costs reduced per sq. ft.
  - Limited office
  - 150,000 sf of retail – enough for anchor and small # of inline/storefront spaces
  - 395 units (25 du/acre) – 39 “workforce” units
- Results
  - DCR falls by 13%
  - Cash on Cash = 3%
  - Value below cost
- Remedies (w/o subsidy)
  - Add program (density) back in
  - Transition structured parking to surface parking
    - Results in retail center with dense single family neighborhood OR
    - Apartment community (700 units+) with no retail

- Results
  - DCR = 0.97
  - Cash on Cash = -0.9%%
  - Value below cost

- Developer profit is not the only variable that matters in public/private sector negotiation. Banks and equity investors must also be satisfied.
- Any addition of cost without revenue, or reduction of revenue with fixed expenses reduces NOI and cash flow after debt service.
  - Typical approach to balance higher fixed costs is to increase revenue producing components (i.e. leasable space).
  - In scenarios where land sales are involved, cost additions impact cost of “prepped” land sold to sub-developers.
- Significant cost additions or reduction in scale not only impact financial feasibility, but also ability for a real estate project to achieve “place-making” goals such as mixed-use, pedestrian oriented, structured vs. surface parking, etc.

# Tax Generation Analysis

Proposed Obey Creek Development

Chapel Hill, North Carolina

Development Concepts, Inc.

November, 2013

## purpose of study

1

Estimate potential tax revenues from proposed Obey Creek mixed-use development to the Town of Chapel Hill.



## limitations of study

2

- Data to be used in more detailed fiscal impact study
  - Does not include estimate of cost of services to project
- Analysis does not include sales tax generation
- Results are estimates based on models using past valuation trends and assumptions by consultant on build-out of development.

Analysis uses two different approaches to estimate tax generation

## (1) CONSERVATIVE APPROACH

- Valuation per Acre
  - Estimates tax revenue by acre using average value of tax revenue per acre from similarly sized projects (FAR) in Chapel Hill, applied to each development “area” within the project (totaling 18 acres out of 30)
  
- Project Valuation
  - Estimates valuation and tax revenue based on estimated total project cost, applies “discount” to project cost to adjust for potential valuation.
  
- “Town Center” Valuation
  - Uses average value of properties classified as “town center”

(continued on next slide)

# revenue scenarios (continued)

4

Analysis uses two different approaches to estimate tax generation

## (2) AGGRESSIVE APPROACH

- Valuation per Acre
  - Similar to method above, but value/acre applied to all 30 developed acres.
  
- Project Valuation
  - Similar to method described above, but no discount applied
  
- “Meadowmont” Valuation
  - Applied average value / sf from Meadowmont parcels as similar project to Obey Creek

- Conservative approach parcels out site into 8 development areas, considers each to be a “project”
- Aggressive approach considers site as single taxable project
- Value per acre and value by sq. ft. data taken from analysis done by Joe Minicozzi
- “Town Center” and “Meadowmont” parcels identified as clusters in tax data by Minicozzi
- Project cost valuation taken from data from developer and integrated into consultant model.

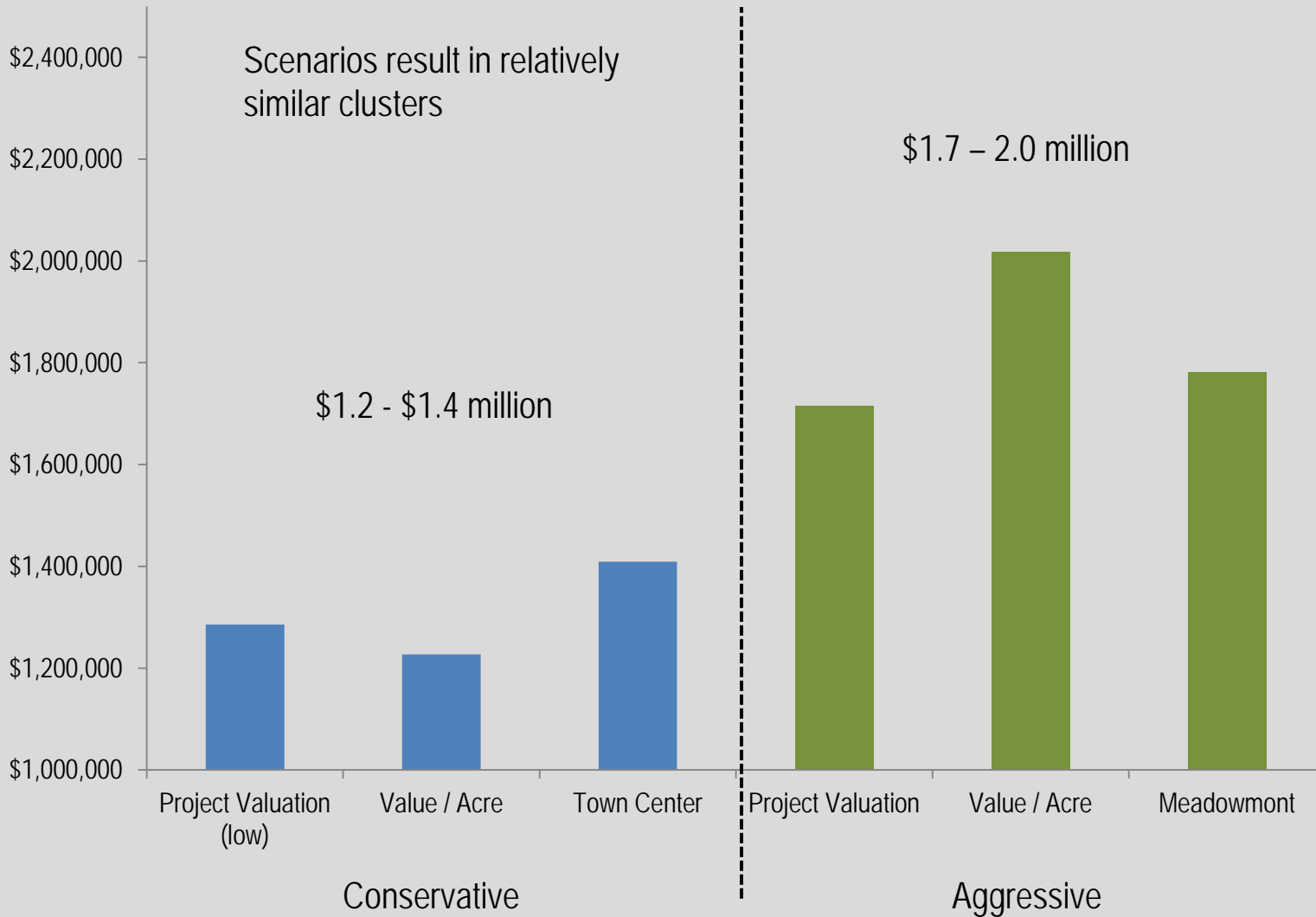
## CONSERVATIVE APPROACH

	Total Value	Notes	Annual Tax Contribution
Project Valuation	\$252 – 268 million*	75-80% discount	\$1.3 - \$1.4 million
Value per acre	\$238 million	\$13 million / acre	\$1.2 million
Town Center Valuation	\$274 million	\$175 / sf	\$1.4 million

## AGGRESSIVE APPROACH

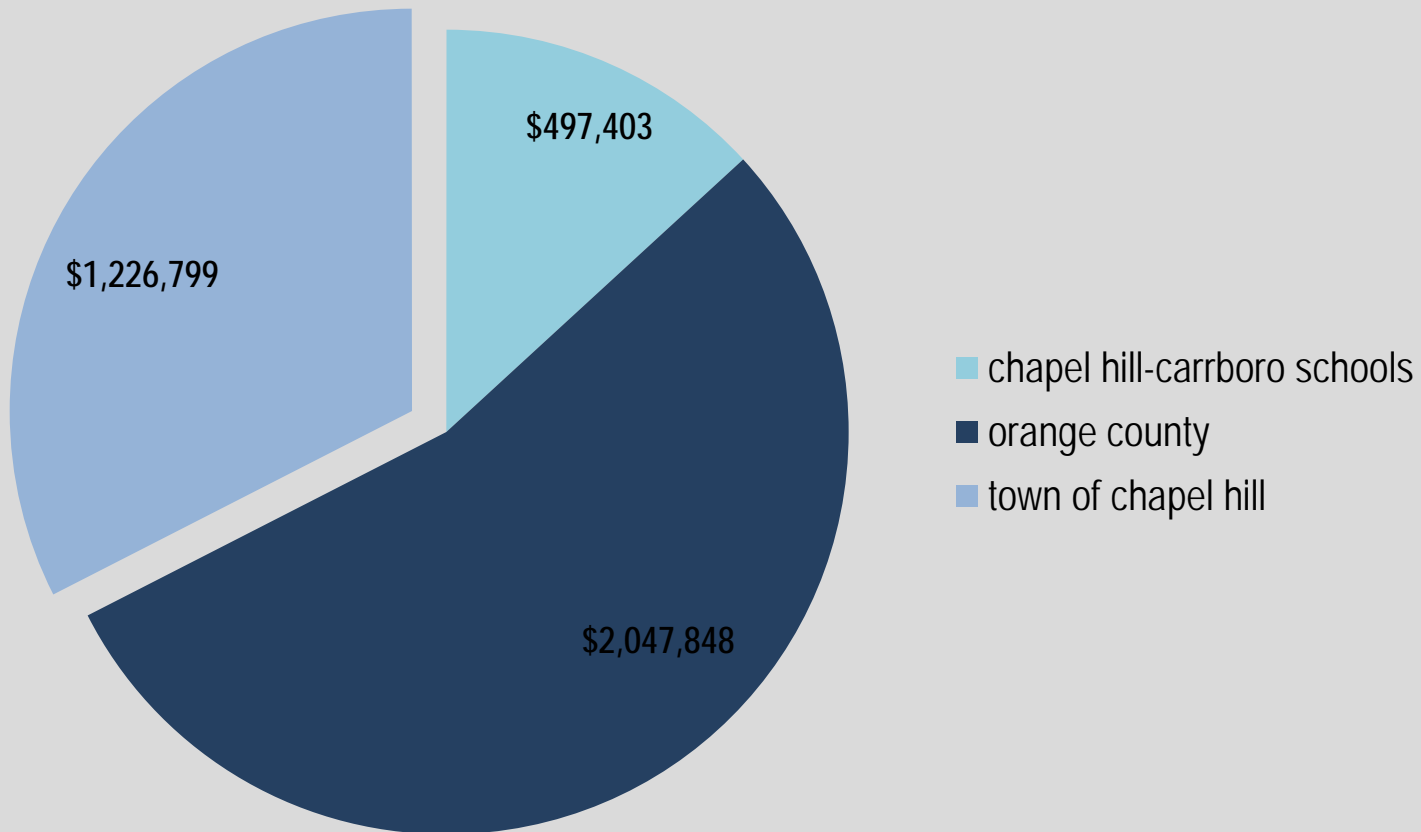
	Total Value	Notes	Annual Tax Contribution
Project Valuation	\$336 million	no discount	\$1.74 million
Value per acre	\$395 million	\$13 million / acre	\$2.0 million
Meadowmont Valuation	\$350 million	\$225 / sf	\$1.78 million

# results



# tax revenue distribution (low)

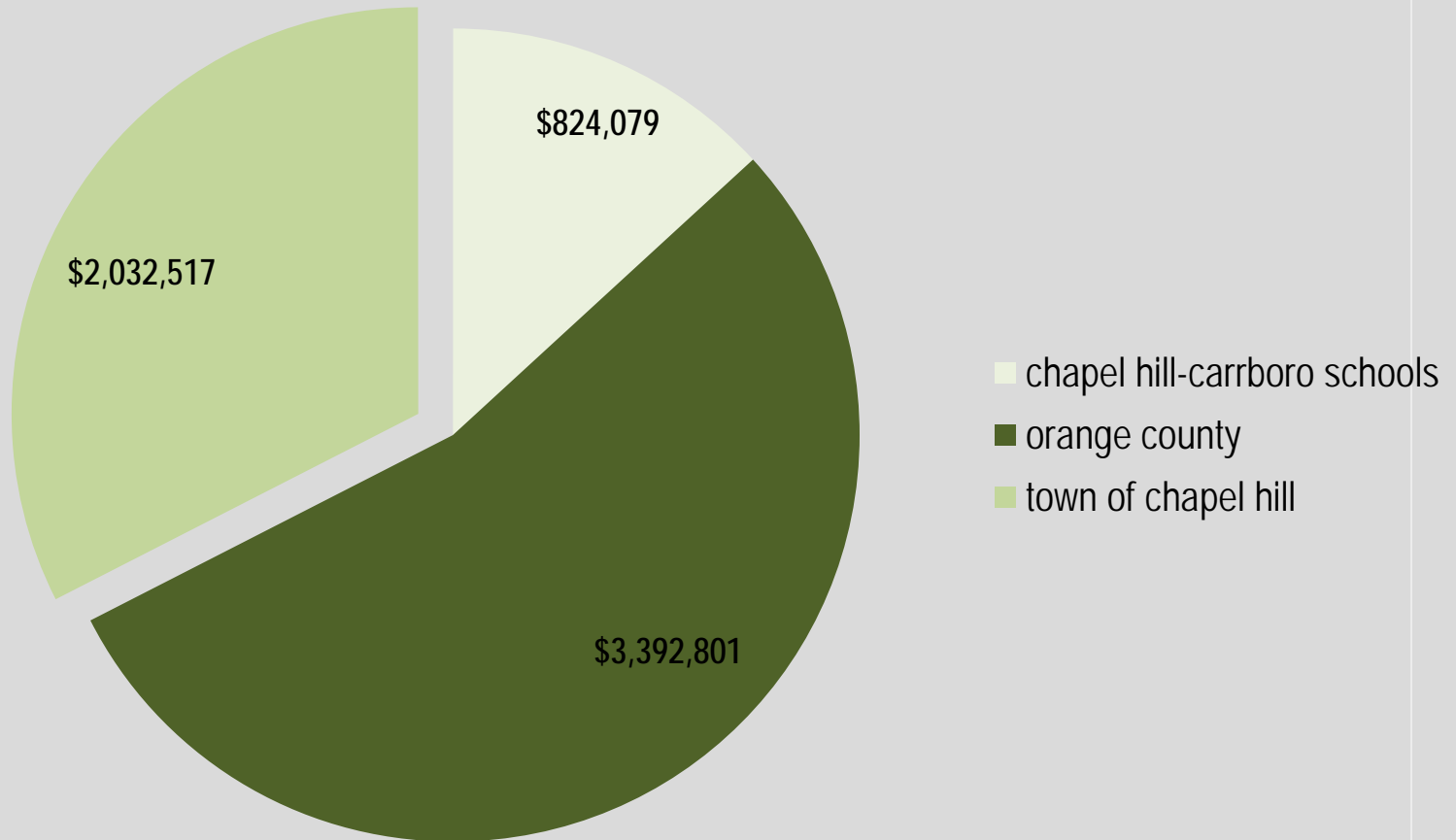
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\* conservative approach - results from value / acre analysis

# tax revenue distribution (high)

9



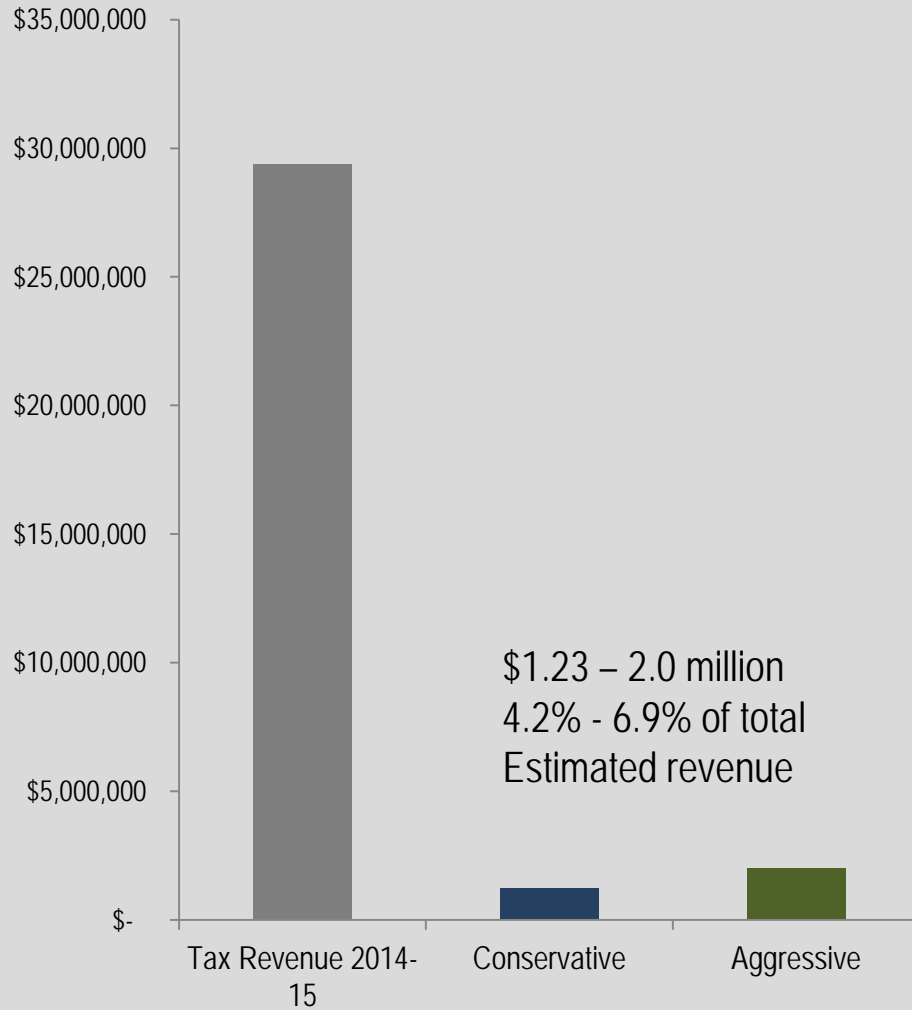
\* Aggressive approach - results from value / acre analysis



# percentage of budget revenue

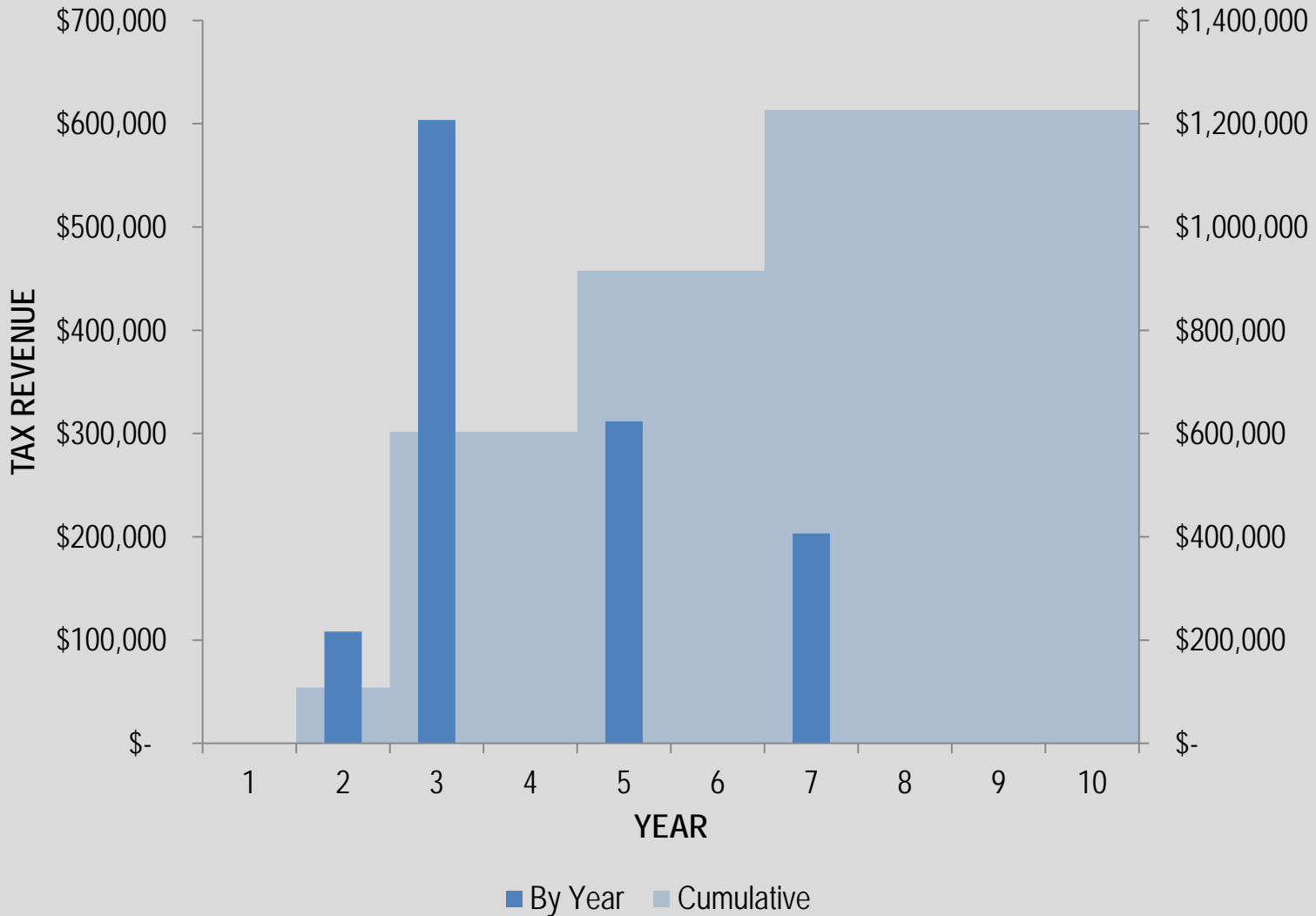
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Estimate portion of 2014-15 budget



# estimated revenues by phase (conservative)

11



# impact from reduction in project size

What happens when square footage is reduced?

	Per Acre	Annual Tax Generation
Existing Development	\$13 million/acre	\$1.2 million
Reduce FAR by 1/3 <sup>rd</sup>	\$10 million / acre	\$950,000
Reduce FAR by 1/2	\$7 million / acre	\$613,000

..... straight line reduction in tax generation

	Annual Taxes	% Change	Square Footage	% Change
Existing Development	\$1.2 million		1.3 million sf	
Reduce FAR by 1/3 <sup>rd</sup>	\$950,000	22%	1.05 million sf	23%
Reduce FAR by 1/2	\$613,000	50%	665k sf	50%

# impact from reduction in project size

