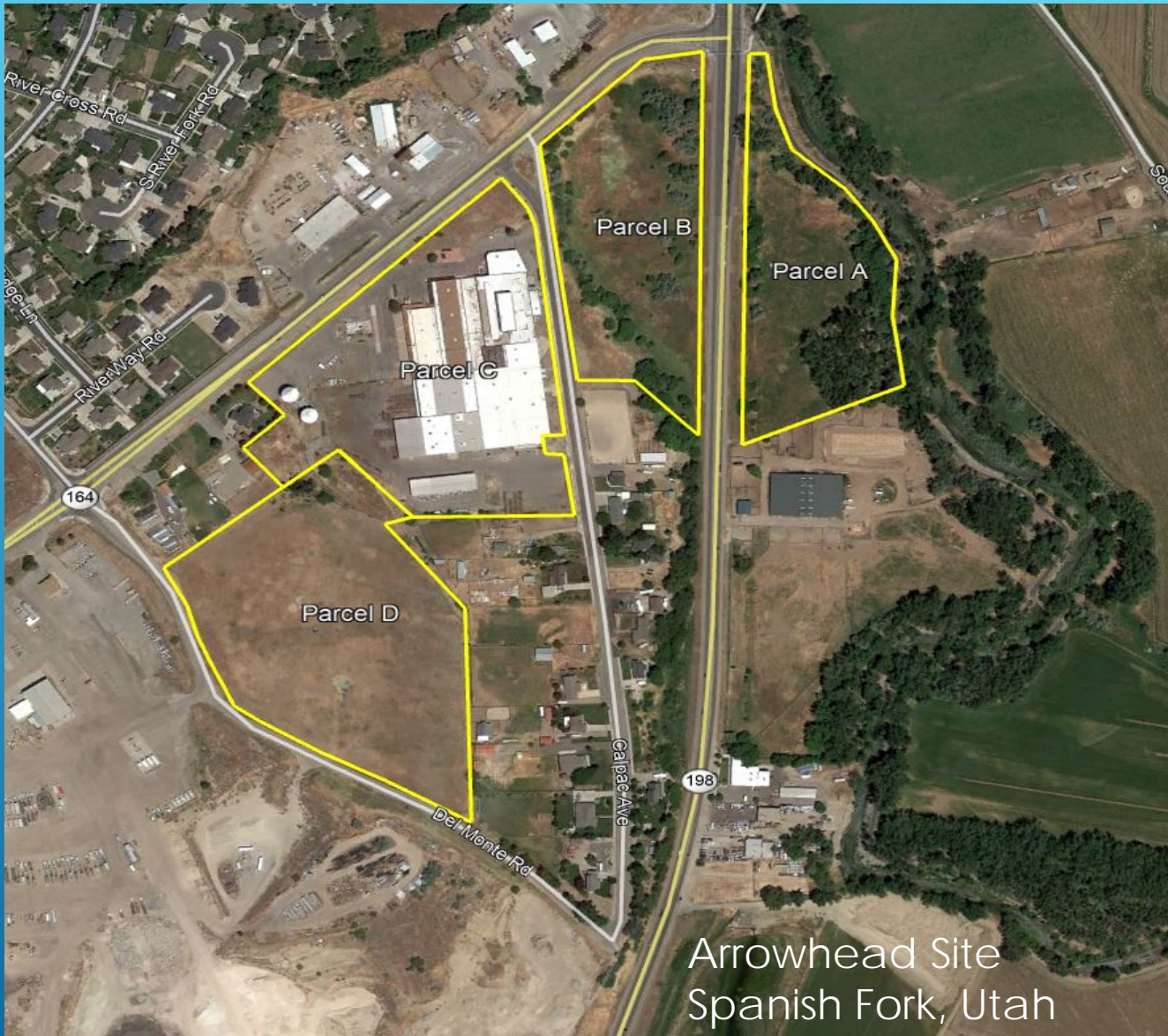


# ARROWHEAD PROJECT

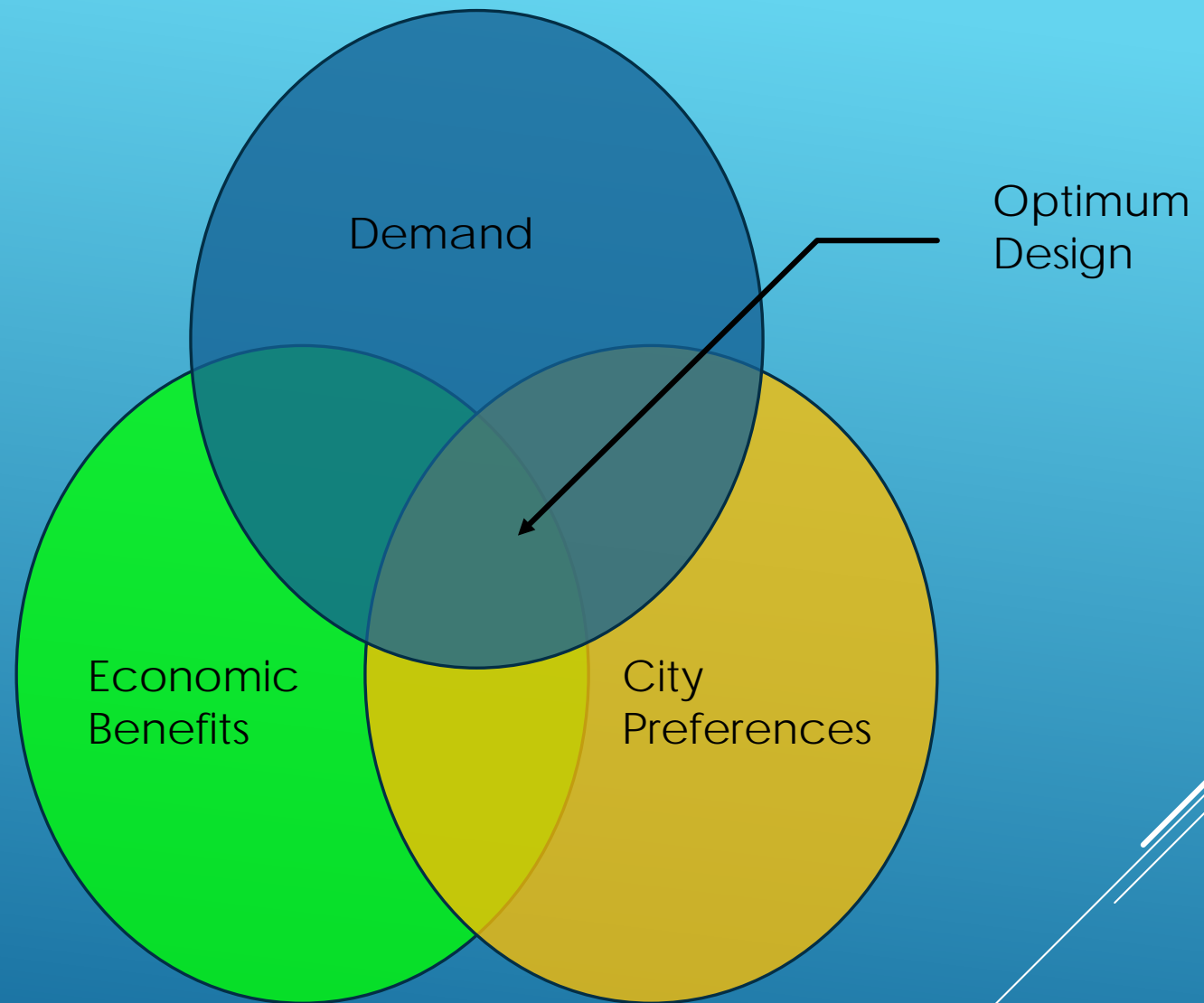
Stuart Withers, Yaqi Huang, Kirk Kauer



Objective:  
Design a preliminary Master Plan

# PROJECT DESCRIPTION

# METHODOLOGY



### **Parcel A**

- Leave as is
- Green space/ park
- Gated community
- Strip mall
- Retail

### **Parcel B**

- Botanical gardens
- Strip mall/ mixed commercial use
- Single family residential
- Public Park
- Indoor Skydiving Facility

### **Parcel C**

- Movie theater/ performing arts
- Reception center/ event venue
- Rec center
- Storage units
- Single family residential
- Grocery Store
- Mixed residential/ commercial

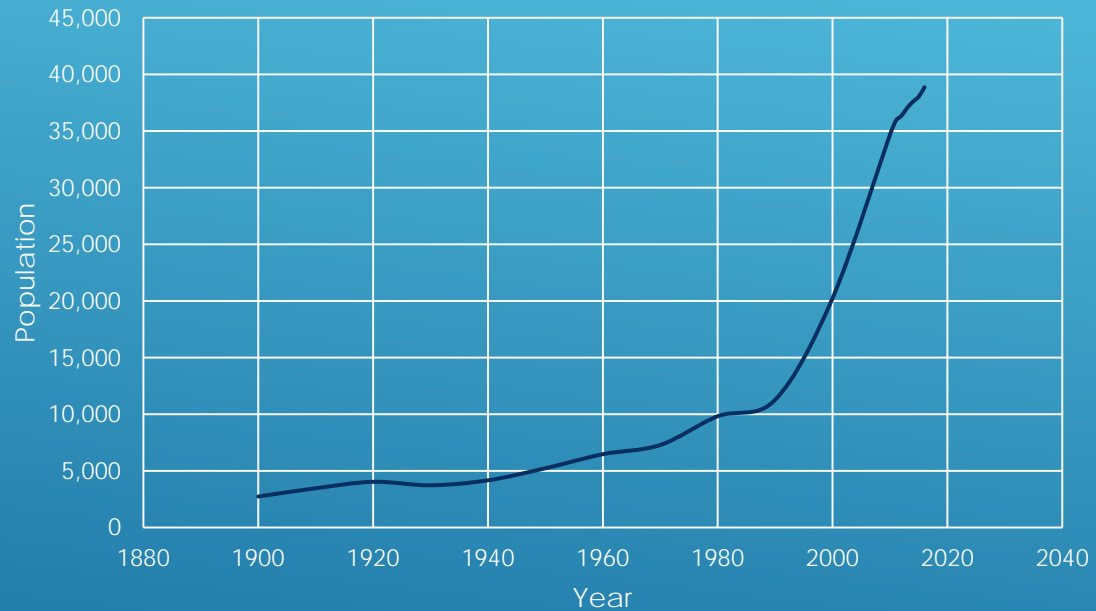
### **Parcel D**

- Retirement community
- Single family residential

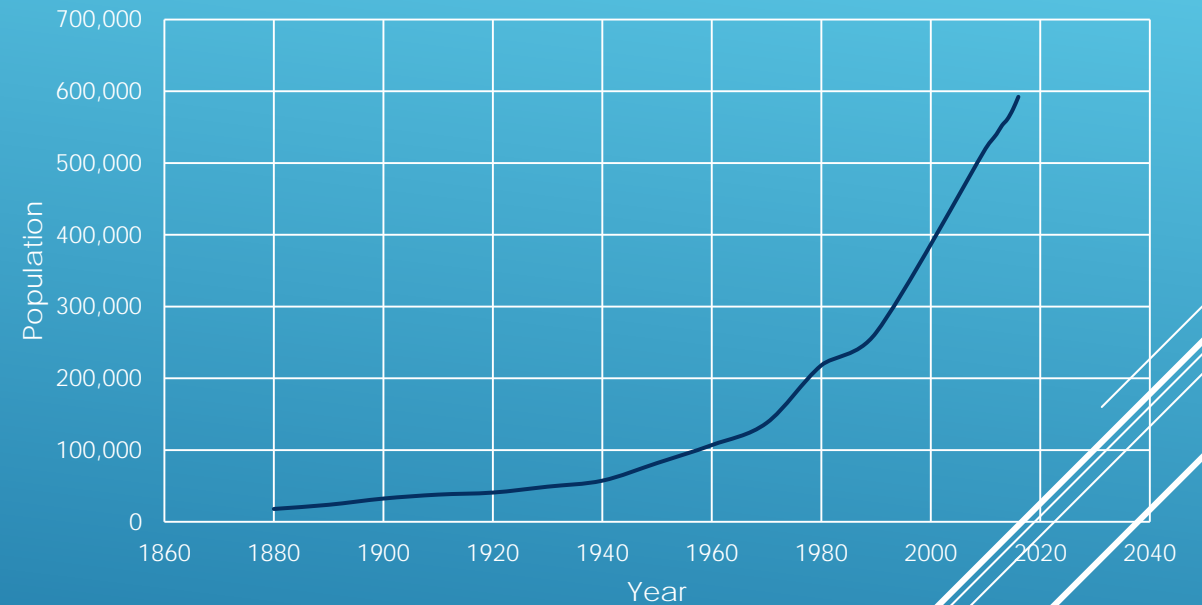
CE EN 201 DESIGNS

Several white lines of varying lengths and angles are positioned in the bottom right corner of the slide, creating a modern, abstract graphic element.

Spanish Fork Population



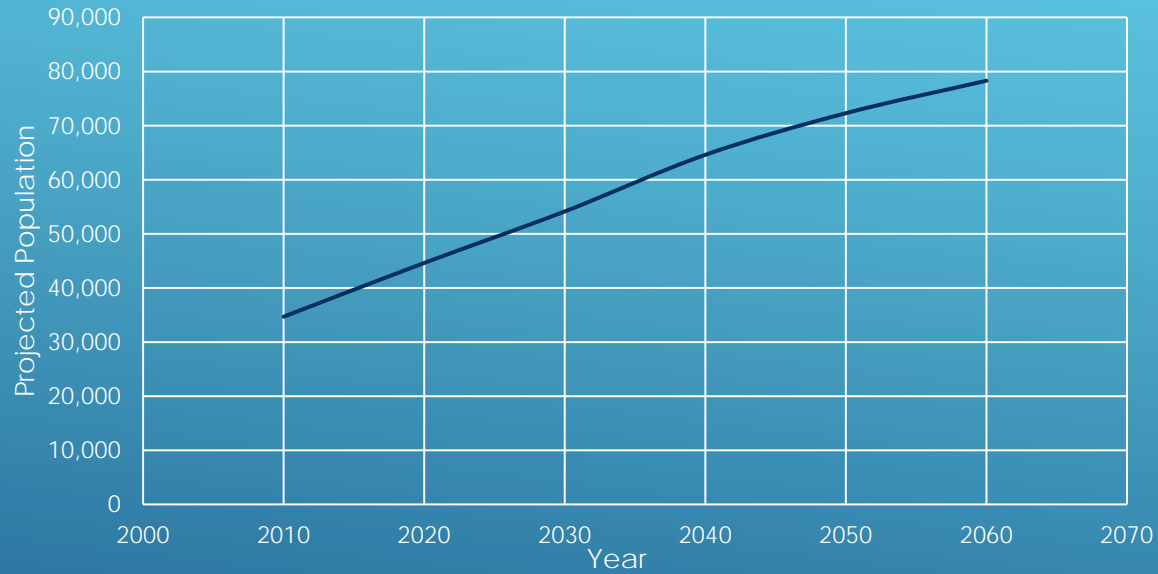
Utah County Population



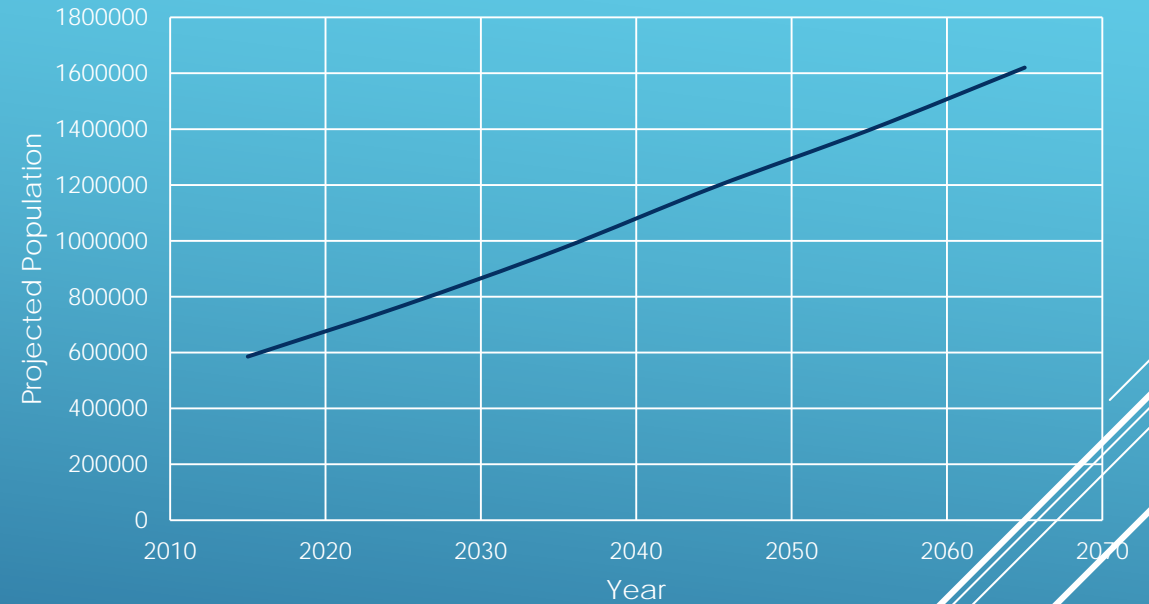
# POPULATION TRENDS

Source: [worldpopulationreview.com](http://worldpopulationreview.com)

Spanish Fork Population



Utah County Population



# EXPECTED GROWTH

Source: Kem C. Gardner Policy Institute 2015-2065 State and County Projections; DemographyUTAH Population Committee 2010-2016 Population Estimates.

“Spanish Fork has seen its population nearly double from just over 20,000 in 2000 to almost 38,000 in 2015, according to data from the U.S. Census Bureau.”

“When it comes to accessing jobs in Provo and Orem, cities such as Springville and Spanish Fork, which are located on I-15, make commuting relatively short and simple.”

-Katie England ,Daily  
Herald, May 28,2016

Several white lines of varying lengths and angles are positioned in the bottom right corner of the slide, creating a modern, abstract graphic element.

# Team Arrow

## PRELIMINARY PLAN

SPANISH FORK, UTAH

Parcel A & B – Office space / Mixed commercial

Parcel C – Mixed residential with commercial strip

Parcel D – Low density residential



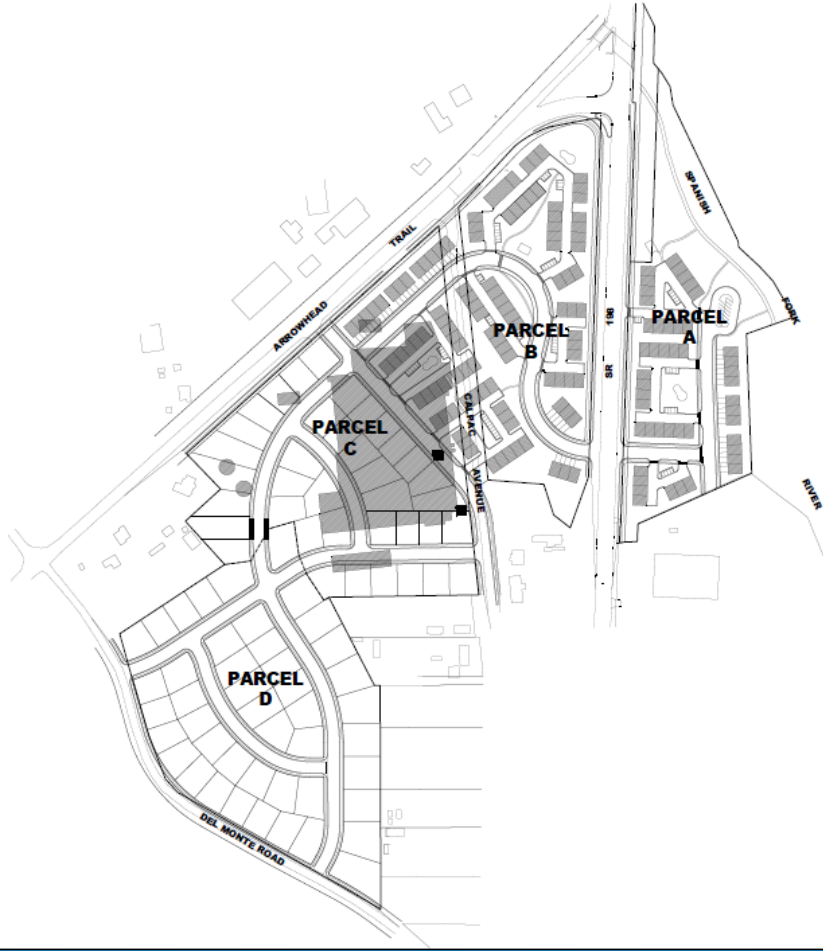
# SOLUTION



# FRITZI SUBDIVISION

## PRELIMINARY PLAN

SPANISH FORK, UTAH



**Parcel A** – Mixed use/Residential.  
Possible 55+ Community at medium density

**Parcel B** – Commercial/ mixed use.  
Possible light work/ live office or medium density multifamily residential

**Parcel C** – Possibly retain industrial building or low density residential

**Parcel D** – Low density residential

FRITZI REALTY  
DESIGN

## Fritzi Realty

### Residential on plot A

22 Buildings (66 units)  
8.65 developable acres  
**7.63 units per acre**

### Residential on plot B

25 Buildings (75 units)  
9.19 acres  
**8.16 units per acre**

### Residential on plot C

50 lots  
13.95 acres  
**3.58 units per acre**

### Residential on plots D

45 lots  
13.09 acres  
**3.44 units per acre**

## Team Arrow Plan

### Commercial on plot A

roughly 68,000 ft<sup>2</sup> of building  
8.65 acre (~377,000 ft<sup>2</sup>)

### Commercial on plot B

roughly 92,000 ft<sup>2</sup> of building  
9.2 acre (~400,000 ft<sup>2</sup>)

### Commercial on plot C

left side - roughly 15,000 ft<sup>2</sup> of building  
~2 acre (87,600 ft<sup>2</sup>)

right side - roughly 12,000 ft<sup>2</sup> of building  
~2 acre (87,000 ft<sup>2</sup>)

### Residential on plots C/D

81 single family plots. (avg size on plot D = 0.25 acre,  
avg size on plot C = 0.33 acre)  
22.9 acres total  
**~3.54 plots/acre**

# COMPARISON

## Estimated Revenue

- Office ~ \$15/ ft<sup>2</sup>/yr
- Retail ~ \$30/ ft<sup>2</sup>/yr
- Townhomes ~ \$1,300/mo
- Homes ~ \$400,000/each

## Sources of Costs

- Office/ Retail ~ \$160/ ft<sup>2</sup>
- Residential ~ \$150/ ft<sup>2</sup>
- Road ~ \$300/ft
- Impact Fees

# ECONOMIC ANALYSIS

Type	Total Space	Revenue		Cost
		Yealy	One time	
Office on A and B	16000 ft <sup>2</sup>	\$ 3,680,000		\$ 25,600,000
Commercial on C	27000 ft <sup>2</sup>	\$ 945,000		\$ 4,320,000
Townhomes	16 units	\$ 288,000		\$ 4,800,000
Home Sale	81 units		\$32,400,000	\$ 42,525,000
Roads	7000 linear ft			\$ 2,100,000
Non Residential Impact Fee	187000 ft <sup>2</sup>			\$ 95,231
Tomehomes Impact Fee	16 units			\$ 77,000
Single Family Impact Fee	81 units			\$ 236,000
Totals		\$ 4,913,000	\$32,400,000	\$ 79,753,231
Total + 10% Contengency				\$ 87,728,554
Pay Off (years)				11
Annual ROI				9%