

# Phased Development

# IPRO 356: Vertical Innovation A Garden in the City

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# Data Charts



- Phase 3**
- 400 Apartments
  - 100 Condominium Units
  - Requisite Parking
  - Water Treatment Facility

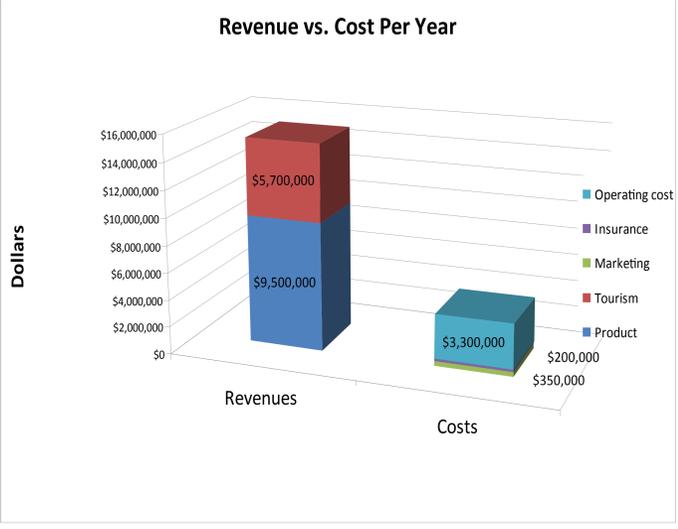
## Cost Analysis

Cumulative financial impact to the developer/investor for entirety of phase 1 and 2: \$91,384,102

The Present Value of Land Development

- Entertainment \$818,586.62
- In-Line Retail \$22,297,724.64
- Big-Box Retail \$6,289,168.76
- Vertical Farm \$120,659,197.42

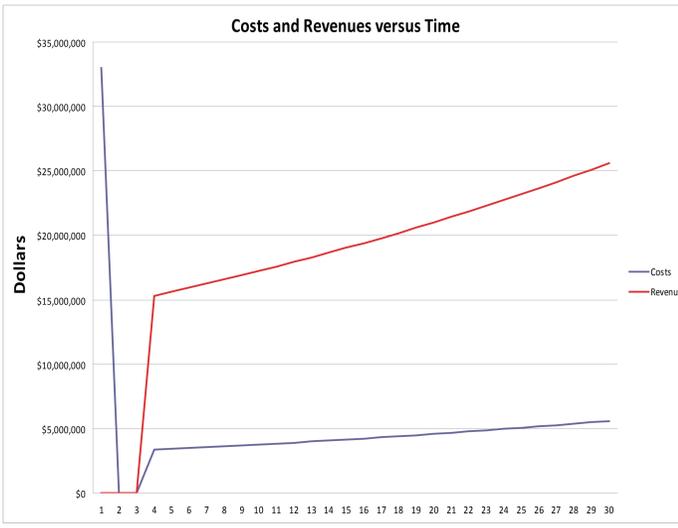
Total NPV of development assuming 30-year hold: \$172,277,034  
 Annual Rate of Return to developer assuming 30-year hold: 23.40%



- Phase 2**
- 25,000 sq. ft. of entertainment space
  - 154,000 sq. ft. of in-line retail
  - 44,000 sq. ft. of big-box retail
  - 190,000 sq. ft. Vertical Farm

## Conclusion

Vertical farming is a profitable and economically viable venture. Renewable technology results in minimal costs, generating profits in an efficient manner. Funding is available in several markets from entities that have proven financial commitments to similar projects such as food production companies, venture capitalists and philanthropists, as well as government and university agencies.



# Acknowledgements

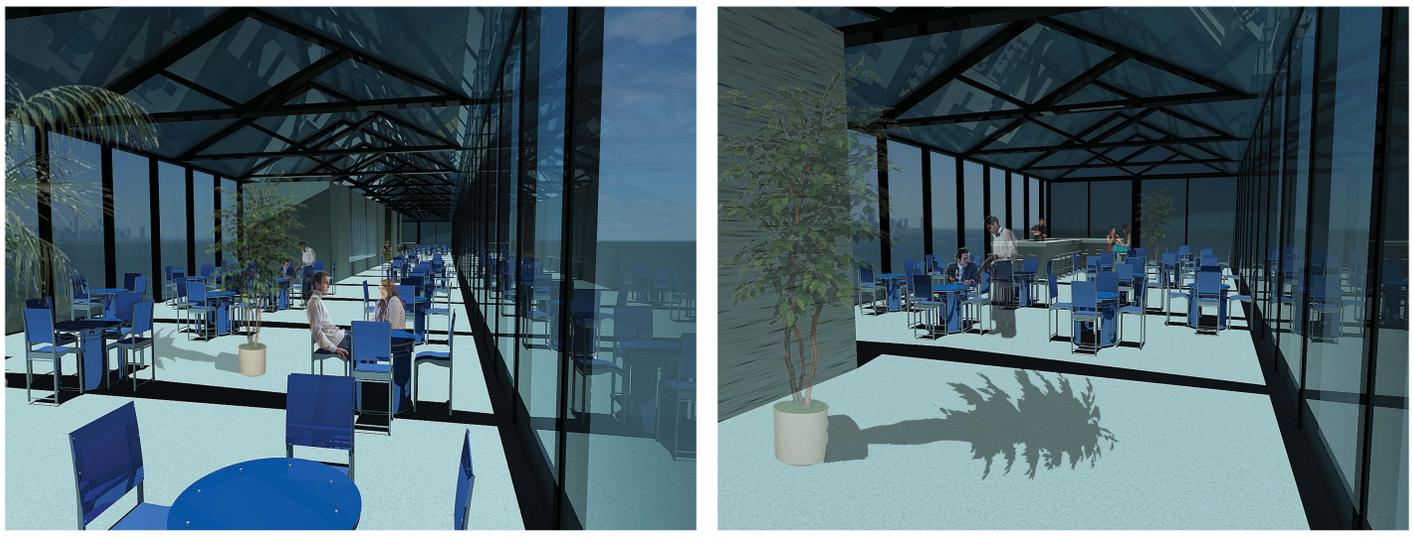
Throughout our research we will have periodic guidance from Eric Ellingsen MA MLA and hopefully from the father of the Vertical farm idea, Dr. Dickson Despommier Ph.D. These professionals have focused a large amount of their research in the last two years to the various elements of vertical and urban farming, and most of their findings and promising designs can be found on <http://www.verticalfarm.com/> which is maintained by Professor Despommier and can be considered a 100% reliable source. Conceptual designs have been made by various graduate students;

- "The Living Skyscraper" by Blake Kurasek
- "Living Tower" by SOA Architects
- "Eco-Laboratory" by Weber Thompson
- "Pyramid Farm" by Ellingsen – Despommier
- "SkyFarm" by Gordon Graff

but no physical building has yet to be built.



- Phase 1**
- 400 Apartments
  - 100 Condominium Units
  - Requisite Parking



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 Professor Snyder, Professor Beck, and Professor Cobo  
 Ray Hodges of CB Richard Ellis  
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