# Return on Investment Model

FLUVANNA BOARD OF SUPERVISORS
WEDNESDAY APRIL 4, 2012

# Summary

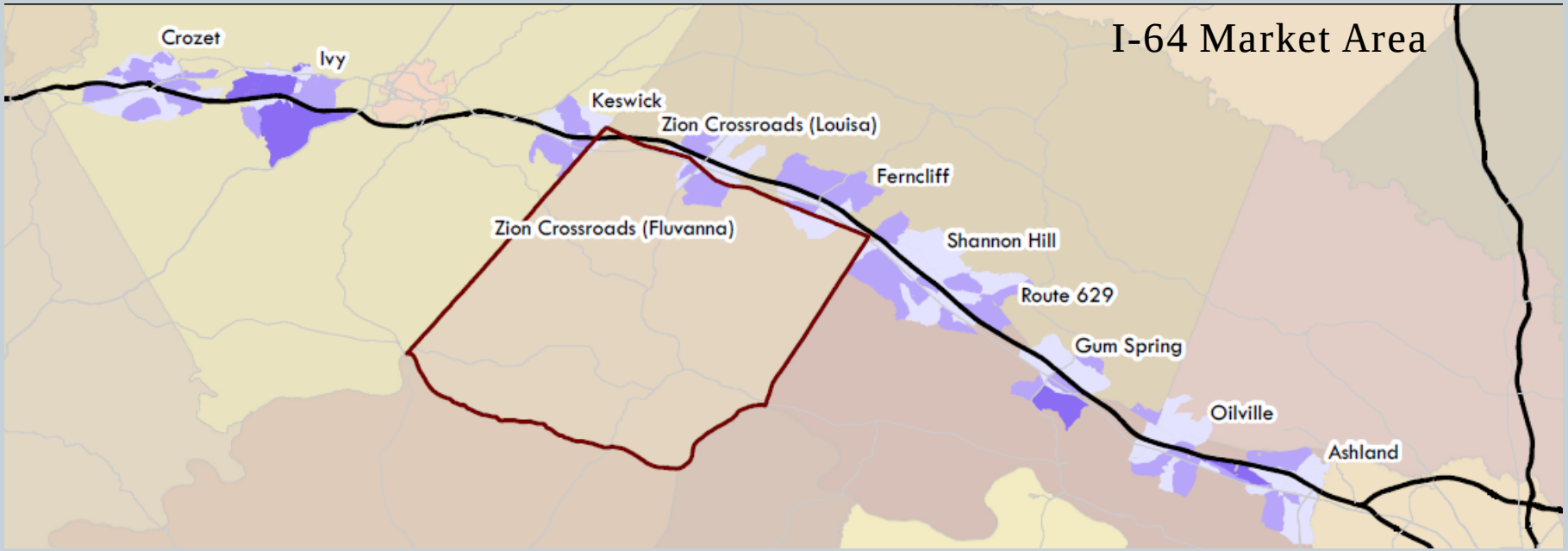
- Purpose
- Methods
  - Market Study
  - Growth Scenarios
  - Study Area
  - Revenue Breakdown
  - Cost Breakdown
- Results
  - Existing Net Revenue
  - Cumulative Net Revenues over 5 to 10 years

# Purpose

- Provide unbiased information to decision-makers

- The ROI model is:
  - Inclusive with all costs/revenues associated with water/sewer and anticipated growth
  - Transparent with its assumptions and methodology
  - Easily Modified – changes in assumptions provide instant results
  - Focused on a 10-Year Planning Horizon

# Market Study




Study Areas around I-64 interchanges

# Market Study

- Compared growth that occurred at interchanges over the past 10 years
- Ignored development with low probability of occurring in the future – such as the Wal-Mart Distribution Center
- Considered residential and non-residential growth
- Functioned as basis for growth scenarios
  - Slow growth
  - Moderate Growth
  - Expected Growth
  - Optimal Growth

# 10 Year **Slow** Growth Scenario

| Category | 10 Year Growth Assumptions | Example: |
|---|---|---|
| Residential | 63 Homes | 26 students, including 169 new residents = .6% increase in the Countywide population |
| Office | 45,000 $ft^2$ | 180 office employees |
| Retail/Service | 153,000 $ft^2$ | 1 small convenience center – grocery store with retail anchor and several small retail stores. |
| Restaurants | 9,000 $ft^2$ | 3 fast food establishments or combination of 1 fast food and 1 dine-in restaurant |
| Industrial | 54,000 $ft^2$ | 2 to 3 medium-sized warehouses<br><br>Medium-sized warehouse = the Blue Ridge Mountain Sports building off Route 15 |

# 10 Year **Moderate** Growth Scenario

| Category | 10 Year Growth Assumptions | Example: |
|---|---|---|
| Residential | 90 Homes | 37 students, including 241 new residents = 1% increase in the Countywide population |
| Office | 94,500 $ft^2$ | 378 office employees |
| Retail/Service | 220,500 $ft^2$ | 1 big-box store surrounded by several smaller retailers (outparcels) = Commercial center 1/2 the size of the "Shoppes at Spring Creek" |
| Restaurants | 9,000 $ft^2$ | 3 fast food establishments or combination of 1 fast food and 1 dine-in restaurant |
| Industrial | 54,000 $ft^2$ | 2 to 3 medium-sized warehouses<br><br>Medium-sized warehouse = the Blue Ridge Mountain Sports building off Route 15 |

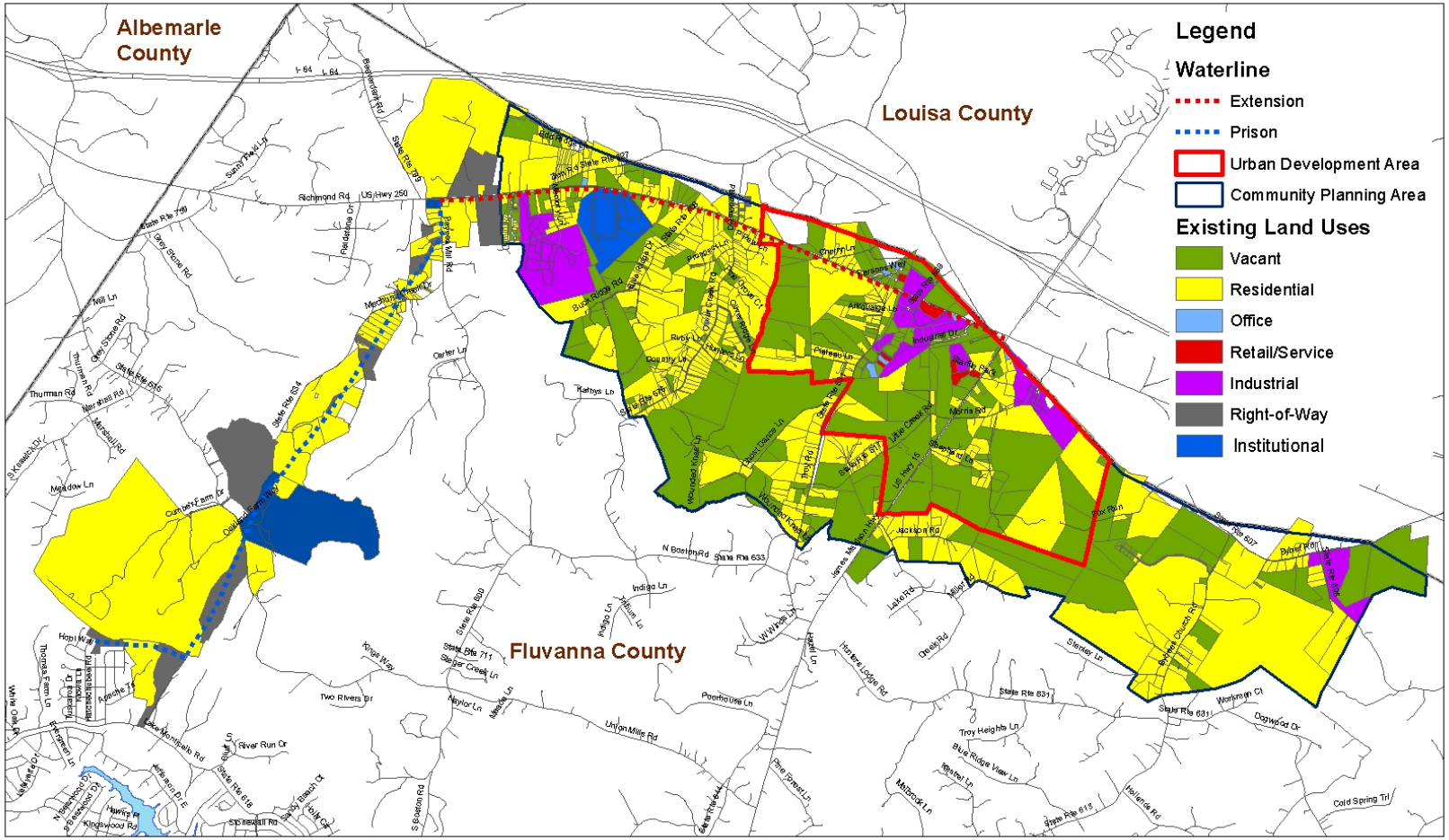
# 10 Year **Expected** Growth Scenario

| Category | 10 Year Growth Assumptions | Example: |
|---|---|---|
| Residential | 126 Homes | 52 students, including 337 new residents = 1.3% increase in the Countywide population |
| Office | 135,000 $ft^2$ | 540 office employees |
| Retail/Service | 292,500 $ft^2$ | 2 retail anchors, a grocer and several small retail outparcels =<br>Commercial center 3/4 the size of the "Shoppes at Spring Creek" |
| Restaurants | 22,500 $ft^2$ | 3 dine-in restaurants and a fast-food establishment |
| Industrial | 63,000 $ft^2$ | 2 to 3 medium-sized warehouses *or* 1 large warehouse<br><br>Medium-sized warehouse = the Blue Ridge Mountain Sports building off Route 15<br>Large warehouse = Mac Steel Building |

# 10 Year **Optimal** Growth Scenario

| Category | 10 Year Growth Assumptions | Example: |
|---|---|---|
| Residential | 180 Homes | 74 students, including 482 new residents = 1.9% increase in the Countywide population |
| Office | 180,000 $ft^2$ | 720 office employees |
| Retail/Service | 409,500 $ft^2$ | 1 regional shopping center – 2 big-box stores with several small retail stores = Commercial center the size of the "Shoppes at Spring Creek" |
| Restaurants | 27,000 $ft^2$ | 4 dine-in restaurants and a fast-food establishment |
| Industrial | 63,000 $ft^2$ | 2 to 3 medium-sized warehouses *or* 1 large warehouse<br><br>Medium-sized warehouse = the Blue Ridge Mountain Sports building off Route 15<br>Large warehouse = Mac Steel Building |

# Study Area




0 0.3 0.6 1.2 1.8 2.4 Miles

**Zion Crossroads Waterline ROI: Existing Land Uses**

# Basic Considerations

| Revenues | Costs |
|---|---|
| Existing Development | Existing Services |
| Future Development | Future Services |
| Waterline Revenue | Waterline Capital/Maintenance |
| Sewer-Line Revenue | Sewer-Line Capital/Maintenance |
| **Total Revenue** | **Total Costs** |

**Total Revenue - Total Costs = Net Revenue**

# Revenue Assumptions

- Tax Rate Assumptions
  - Real Estate (per $100 assessed value) - $.57
  - Personal Property (per $100 assessed value) - $4.15
  - County share of sales (on the dollar) - 1%
  - Space-holders for other revenue sources:
    - Meals Tax
    - Machinery and Tool Tax

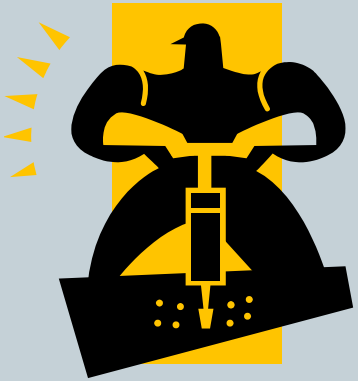
# Revenue Assumptions

- Water System Assumptions
  - Connection Fee - $3,750
  - Water Rate (per 1,000 gallons) - $8
  - Availability Fee - $500,000/year for first 6 years

- Sewer System Revenue
  - Connection Fees - $4,500
  - Sewer Rate (per 1,000 gallons) - $10

# Cost Assumptions

- Waterline Costs
  - Meter Box Maintenance (per connection)- $250
  - Water (first 127,000 gallons/year) – $950,000
  - Water over 127,000 gallons (per 1,000 gallons) - $2.95
- Sewer Line Costs
  - Baseline Cost – $94,900
  - Maintenance (per 1,000 gallons) – $.10
  - Charge from DOC (per 1,000 gallons) – $2



# Cost Assumptions

- Service Costs
  - Schools (Local Costs per Student) - $4,302
  - New High School Debt Services (per Developed Acre) - $96.6
  - County Administrative Costs (per Developed Acre) - $176

# Results

$.57 Tax Rate

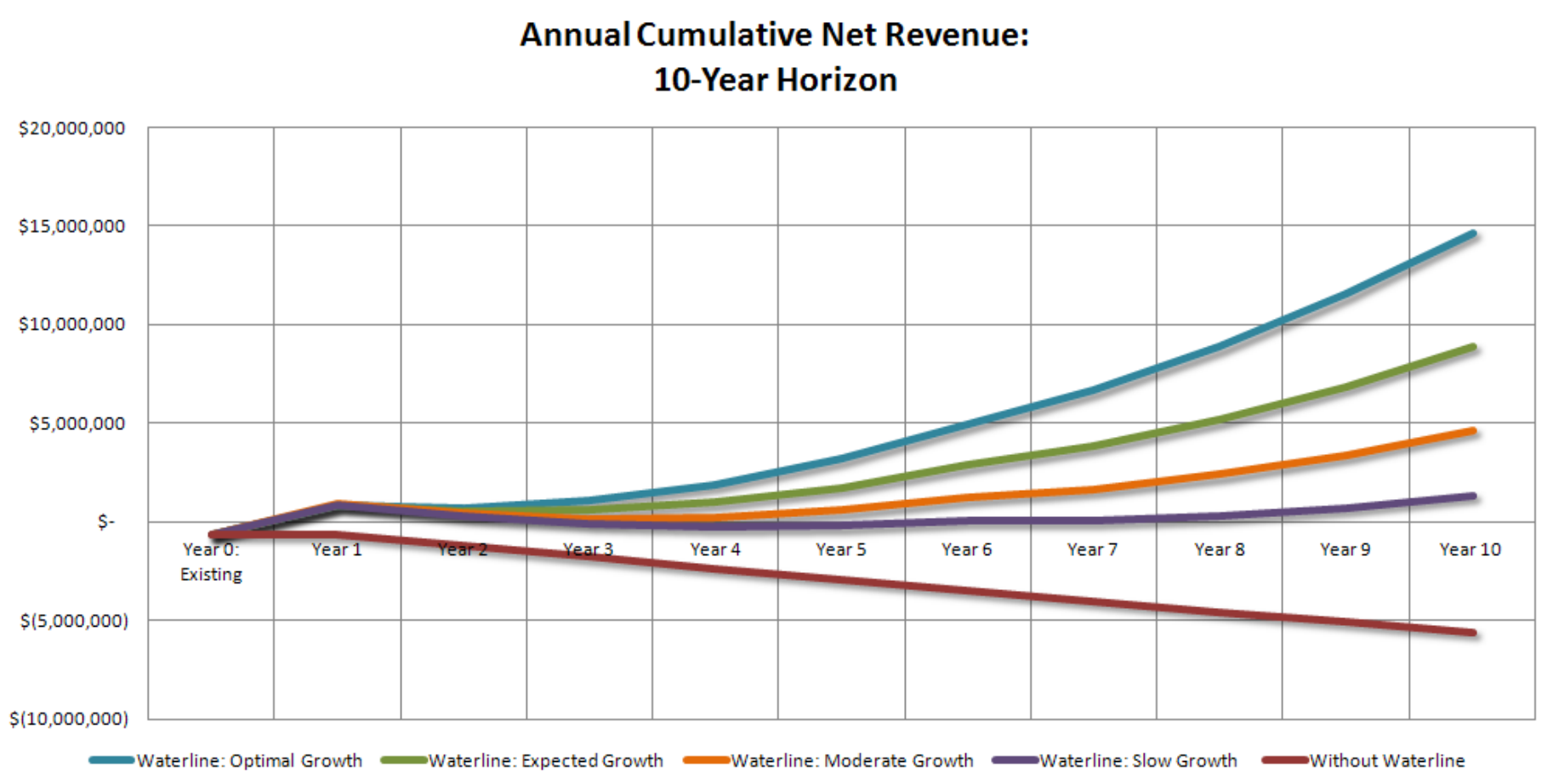
| Annual | Gross Revenue | Gross Cost | Net Revenue |
|---|---|---|---|
| Existing (Snapshot) | $1,573,973 | -$1,977,747 | **-$403,774** |

| Scenarios | Year 5: Cumulative Figures | | | Year 10: Cumulative Figures | | |
|---|---|---|---|---|---|---|
| | Gross Revenue | Gross Cost | Net Revenue | Gross Revenue | Gross Cost | Net Revenue |
| Without Waterline | $7,051,335 | -$9,967,626 | -$2,916,290 | $14,543,926 | -$20,132,483 | -$5,588,557 |
| Waterline: Slow Growth | $16,139,607 | -$16,346,267 | -$206,660 | $35,519,214 | -$34,167,189 | $1,352,025 |
| Waterline: Moderate Growth | $17,011,778 | -$16,461,695 | $550,082 | $39,389,791 | -$34,763,989 | $4,625,802 |
| Waterline: Expected Growth | $18,448,967 | -$16,695,620 | $1,753,346 | $44,614,432 | -$35,678,978 | $8,935,454 |
| Waterline: Optimal Growth | $20,179,512 | -$16,974,296 | $3,205,216 | $51,595,036 | -$36,890,570 | $14,704,467 |

| Year 0 | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 | Year 7 | Year 8 | Year 9 | Year 10 |
|---|---|---|---|---|---|---|---|---|---|---|

# Results

$.57 Tax Rate



# Summary

- Currently, Fluvanna County looses $403,774 per year in the Zion Crossroads area

  (Cost of Services > Revenue Collected)

**10 Year** Cumulative Figures

| Scenarios | Net Revenue ($.57 tax rate) |
|---|---|
| No Waterline | -$5,588,557 |
| Slow Growth | $1,352,025 |
| Moderate Growth | $4,625,802 |
| Expected Growth | $8,935,454 |
| Optimal Growth | $14,704,467 |

# Questions

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