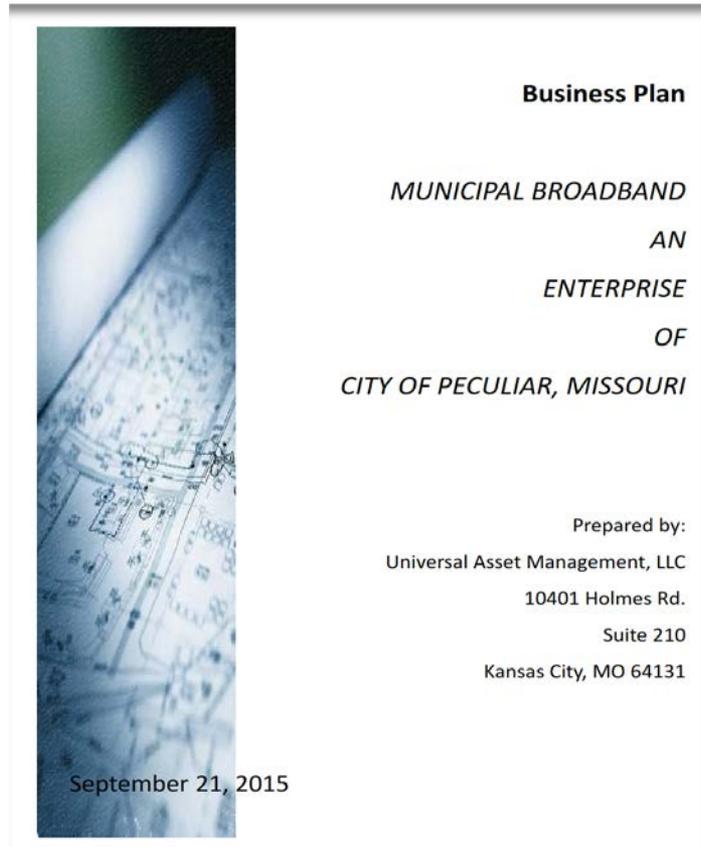
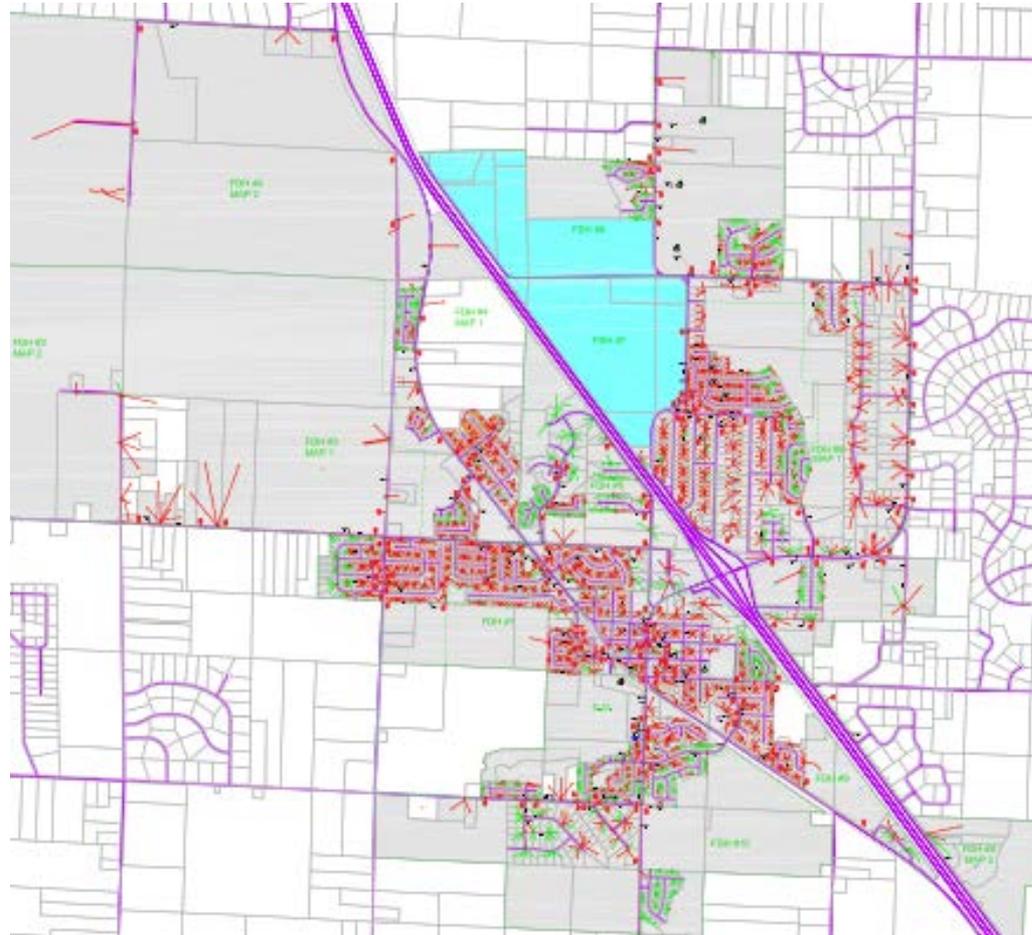


# Peculiar Fiber to the Home FTTH



# Network Service Area



# Issues to Reduce Capital Costs

- ▶ Relocate outside plant fiber from backyards to street rights of way
  - ▶ Reduce fiber ring to half of original length
  - ▶ Reduce engineering costs
  - ▶ Reduce fiber splice requirements
- 

# Collaboration

- ▶ Howco Inc, Pleasant Hill, Missouri
  - ▶ Mark One, Kansas City, Missouri
  - ▶ KGP Logistics
  - ▶ Midwest Meters Inc, Edinburg, Ill
  - ▶ McLiney and Sons
- 

# Survey

- ▶ Two survey methods
    - Phone
    - Internet
  - ▶ 1900 phone numbers provided
  - ▶ Obtained 200 phone responses 179 internet responses
  - ▶ Margin of Error 5%
- 

# Survey Results

- ▶ 95% of homes on internet
  - ▶ 85% of citizens want faster internet service
  - ▶ 88% said they would switch to high speed broadband
  
  - ▶ 77% believe the City should plan some role
  - ▶ 27% believe the City should only solicit private companies to develop a network
  - ▶ 23% state that the City should play NO role
- 

# Capital Cost

Project Costs	Budget Original
NETWORK & ACCESS EQUIPMENT	\$ 932,980
OUTSIDE PLANT	\$ 4,725,355
SUBSCRIBER EQUIPMENT	\$ -
BILLING SUPPORT AND OPERATIONS SUPPORT SYSTEMS	\$ 25,000
OPERATING EQUIPMENT (vehicles, office equipment, etc.)	\$ 15,000
PROFESSIONAL SERVICES	\$ 629,560
START UP COSTS	\$ 50,000
OTHER	\$ 100,000
Total	\$ 6,477,895
Total For Project	\$ 6,477,894.77

# Operation Variables

Video	\$	50.00
Data	\$	65.00
Voice	\$	20.00
Business HSD	\$	200.00
Installation fees (per connect)	\$	50.00

# Market Penetration

	Quarter 1	Quarter 2	Quarter 3	Quarter 4
<b>Cummulative miles constructed</b>	5	23	47	47
<b>Customers Passed</b>				
Homes passed - constructed	-	479	958	1,916
Businesses passed - constructed	-	5	5	5
Anchors passed - constructed	-	5	5	5
<b>Penetration Rate</b>				
Customer penetration	70%	70%	70%	70%
Business penetration	100%	100%	100%	100%
Anchor penetration	100%	100%	100%	100%
<b>Customers Connected</b>				
Residential Customers	-	335	671	1,341
Businesses	-	5	5	5
Anchors	-	5	5	5

# Income Statement

<b>Revenues</b>	
Video	\$ 62,165
Data	\$ 183,074
VOIP	\$ 27,172
Business HSD	\$ 6,180
Installation fees (per connect)	\$ 2,088
Wholesale	
<b>Total</b>	<b>\$ 280,678</b>
<b>Costs of Goods Sold</b>	
Video Program Cost	\$ 44,759
Internet Connectivity	\$ 13,562
Telephone	\$ 18,106
Pole Rental	\$ -
<b>Total</b>	<b>\$ 76,427</b>
<b>Gross Profit</b>	<b>\$ 204,251</b>
<b>Operating Expenses</b>	
Salaries & Wages	\$ 45,547
Employee Insurance Group, Health Life	\$ 2,277
Taxes Payroll	\$ 3,188
Payroll Service Expense	\$ 455
Consulting Fees	\$ 1,015
Repairs & Maintenance	\$ 3,232
Equipment	\$ 1,015
Legal & Accounting Fees	\$ 508
Travel	\$ 102
Training & Education	\$ 508
Advertising	\$ 1,015
Dues & Subscriptions	\$ 127
Fees & Licenses	\$ 254
Postage & Shipping	\$ 203
Telephone & Communication	\$ -
Computer Expense	\$ 508
Meals & Entertainment	\$ 102
Rent & Utilities	\$ 2,030
Misc. Expense	\$ 1,015
Management Fee	\$ 1,015
<b>Total</b>	<b>\$ 64,114</b>
<b>Operating Profit</b>	<b>\$ 140,137</b>
Interest Expense	\$ 62,631
Principal Payment	\$ 52,581
<b>Net Income</b>	<b>\$ 24,925</b>
Principal and Interest	\$ 115,212
Coverage	1.22

# Phasing by FDH

FDH	Cost per subscription
1	\$2,500
2	\$1,883
3	\$3,355
4	\$4,218
5	\$10,324
6	\$7,494
7	\$2,702
8	\$5,120
9	\$2,961
10	\$5,300
C.O.	\$4,073

# Capital Cost of First Phase

NETWORK & ACCESS EQUIPMENT	\$ 579,061
OUTSIDE PLANT	\$ 3,306,132
SUBSCRIBER EQUIPMENT	\$ -
BILLING SUPPORT AND OPERATIONS SUPPORT SYSTEMS	\$ 25,000
OPERATING EQUIPMENT (vehicles, office equipment, etc.)	\$ 15,000
PROFESSIONAL SERVICES	\$ 333,614
START UP COSTS	\$ 50,000
OTHER	\$ 100,000
Total	\$ 4,408,807
Total For Project	\$ 4,408,806.91

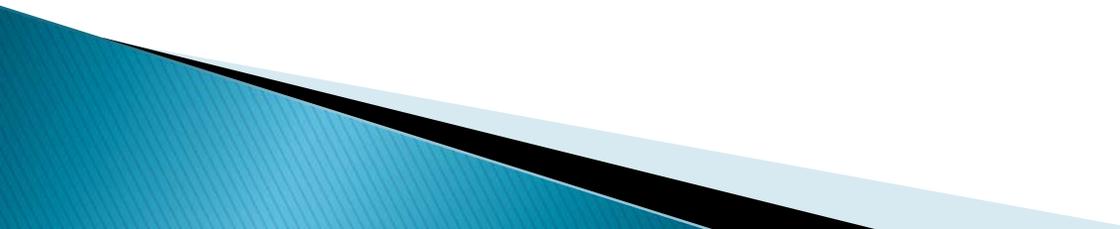
# Findings

- ▶ A financially self sustaining broadband system appears feasible
  - ▶ A super majority of citizens want a high speed service
  - ▶ The community is evenly split in its thoughts as to the role of the City in a broadband effort
  - ▶ Local businesses seem supportive of a high speed network
  - ▶ The health clinic and school system appear not to be interested in an alternative broadband option
  - ▶ There are significant benefits to the water and sewer utilities
- 

# Considerations

- ▶ Convert water meters to smart meters
  - ▶ Implement remote monitoring to bulk water meter
  - ▶ Implement SCADA system for wastewater facilities
  - ▶ Provide enlarge casing under I-49 to accommodate a new 12 “ water line and fiber
  - ▶ Maximize privatization of network
- 

# Recommendation

- ▶ The City should solicit proposals from private companies
    - Option 1– Totally private endeavor
    - Option 2– Public Private Partnership
      - City provides funding and owns assets
      - Private company operates and maintains system
  - ▶ If the City receives no response to Option 1 consider those responding under Option 2
  - ▶ If no responses are received for either option reconsider the deployment of a network
- 

# Next Steps

1. Complete Statistical Market Study
2. Complete Business Case
3. Review Concept and Plan with City
4. Obtain City Council Endorsement
5. Prepare and Solicit Privatized RFP
6. Conduct by FDH Area Door to Door Customer Sign-ups
1. Implement FDH Construction Once 70% sign-ups are obtained in each FDH