



# Wireless Fire Alarm Network

**Fire Rescue Chief James P. Moore**

**Bureau Chief Jerry Larsen**



# Agenda

- **Proposed concept**
- **Purpose of fire alarms**
- **Current fire alarm monitoring program**
- **Proposed fire alarm monitoring program**
- **Plan of action**
- **Questions and Answers**





# Proposed Concept

- **Develop a wireless fire alarm network that will provide improved service at a lower cost to our business community.**



# Purpose of Fire Alarms

- **Why does the fire code require fire alarms?**
  - Alert building occupants
  - Life safety of customers and employees
  - Notify the fire department
  - Business continuity
  - Protect property





# Purpose of Fire Alarms

- **Why does a fire alarm need to be monitored?**
  - Notify Fire Rescue Department.
  - Occupants typically do not call 911 when the fire alarm goes off.
  - Fires in unoccupied structures.
  - Reduced insurance rate





# Purpose of Fire Alarm

- **Why does my fire alarm have to be monitored by SEECOM?**
  - A key component of effective fire suppression is early notification and prompt dispatch. Without a direct connection to SEECOM (our dispatch center) alternate alarm notifications can take up to 15 minutes .







# Current Fire Alarm Program

- **Ordinance 6376 / Code 251-2 (27)**
  - New and existing fire alarm systems shall be monitored at the Fire Rescue Communications Center. (Section 903.4.1)



# Current Fire Alarm Program







## Cost of Current Fire Alarm Program

Agency	Cost per month	Cost per year
AT&T	\$99.51	\$1,194.12
ADT Municipal	\$25.00	\$300.00
<b>Total</b>	<b>\$124.51</b>	<b>\$1,494.12</b>

## Cost of Proposed Fire Alarm Program

Agency	Cost per month	Cost per year
City of Crystal Lake	\$80.00	\$960.00
<b>Total</b>	<b>\$80.00</b>	<b>\$960.00</b>



# Challenges of Current Fire Alarm Program

- **Current technology used can produce false signals:**
  - Trouble Alarms
  - Fire Alarms
  - Ground Fault
  - System voltage fluctuations
- **Business owner obligate to work with contractor for alarm transmission problems.**



# Proposed Wireless Fire Alarm

- **Crystal Lake Wireless Alarm Network (CLWAN)**
  - The system will use proven technology that is currently employed in numerous other communities.
  - Eliminates the need for a dedicated phone circuit to monitor the fire alarm system.
  - Alarm is monitored in the same dispatch center that dispatches our firefighters.

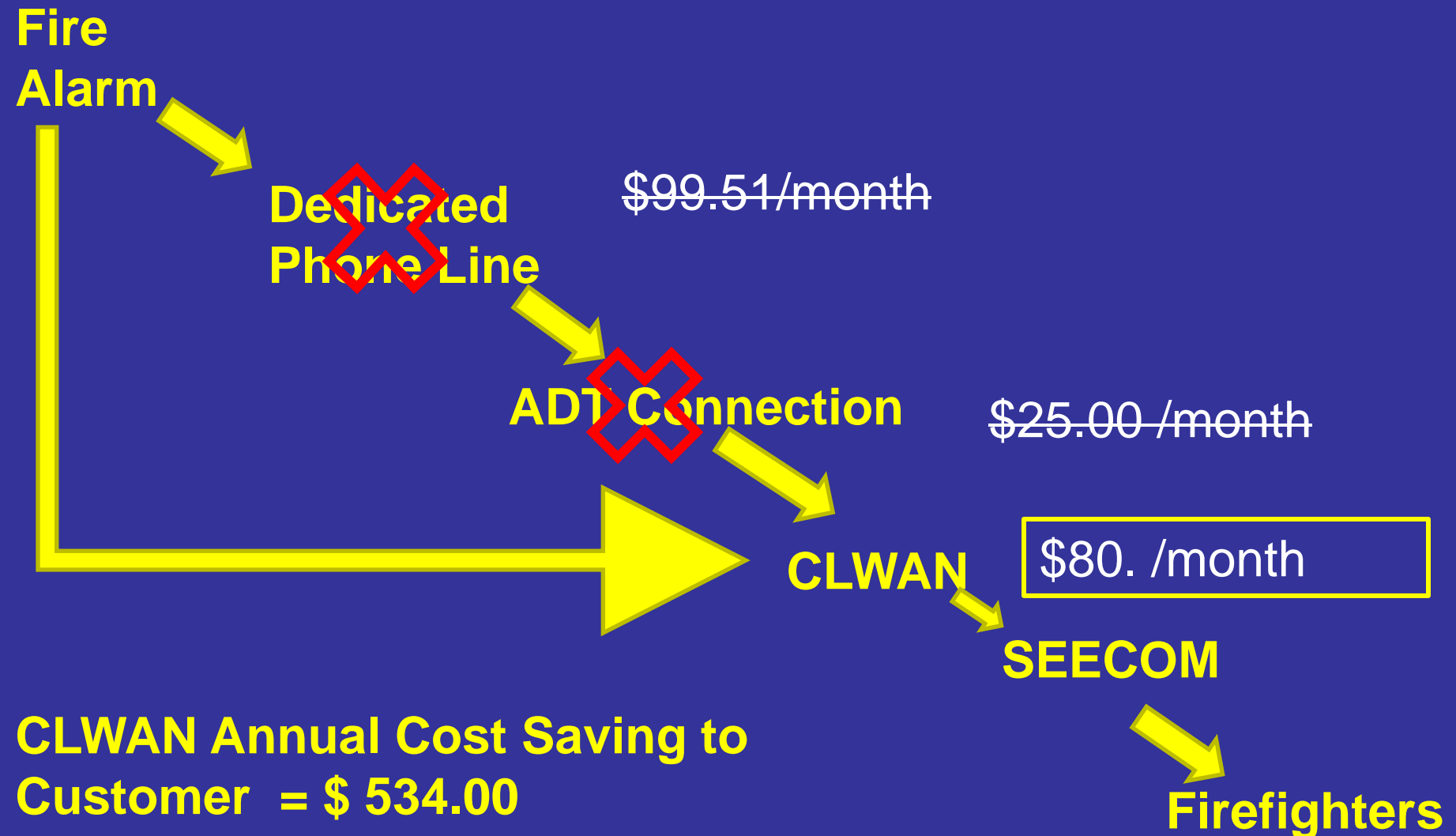


# Proposed Wireless Fire Alarm

- **Top benefits of the CLWAN:**
  - Improved service through prompt notification of alarm activation and dispatch of firefighters.
  - Decreased cost to the customer.
  - Decrease number of false activations and business interruptions.



# Current Fire Alarm Program vs. CLWAN





# Cost Comparison

## Alarm Monitoring & Wireless Transmission

Agency	Cost per month	Cost per year
ADT/AT&T	\$124.51	\$1,494.12
City of Crystal Lake	\$80.00	\$960.00
<b>Savings to customers</b>	<b>\$44.51</b>	<b>\$534.12</b>



# Cost Comparison

## Connection Fee

Agency	Current	Proposed
ADT	\$125	
AT&T	\$129	
Crystal Lake		\$200
Total	\$254	\$200





# Proposed CLWAN Requirements

- All monitored fire alarms in the City of Crystal Lake and Crystal Lake Rural Fire Protection District must be monitored through the Crystal Lake Wireless Alarm Network, within one year of the commencement of the CLWAN system.
- Businesses joining the CLWAN during first year will have the connection fee waived.
  - Installation of the wireless network equipment in businesses at no cost.

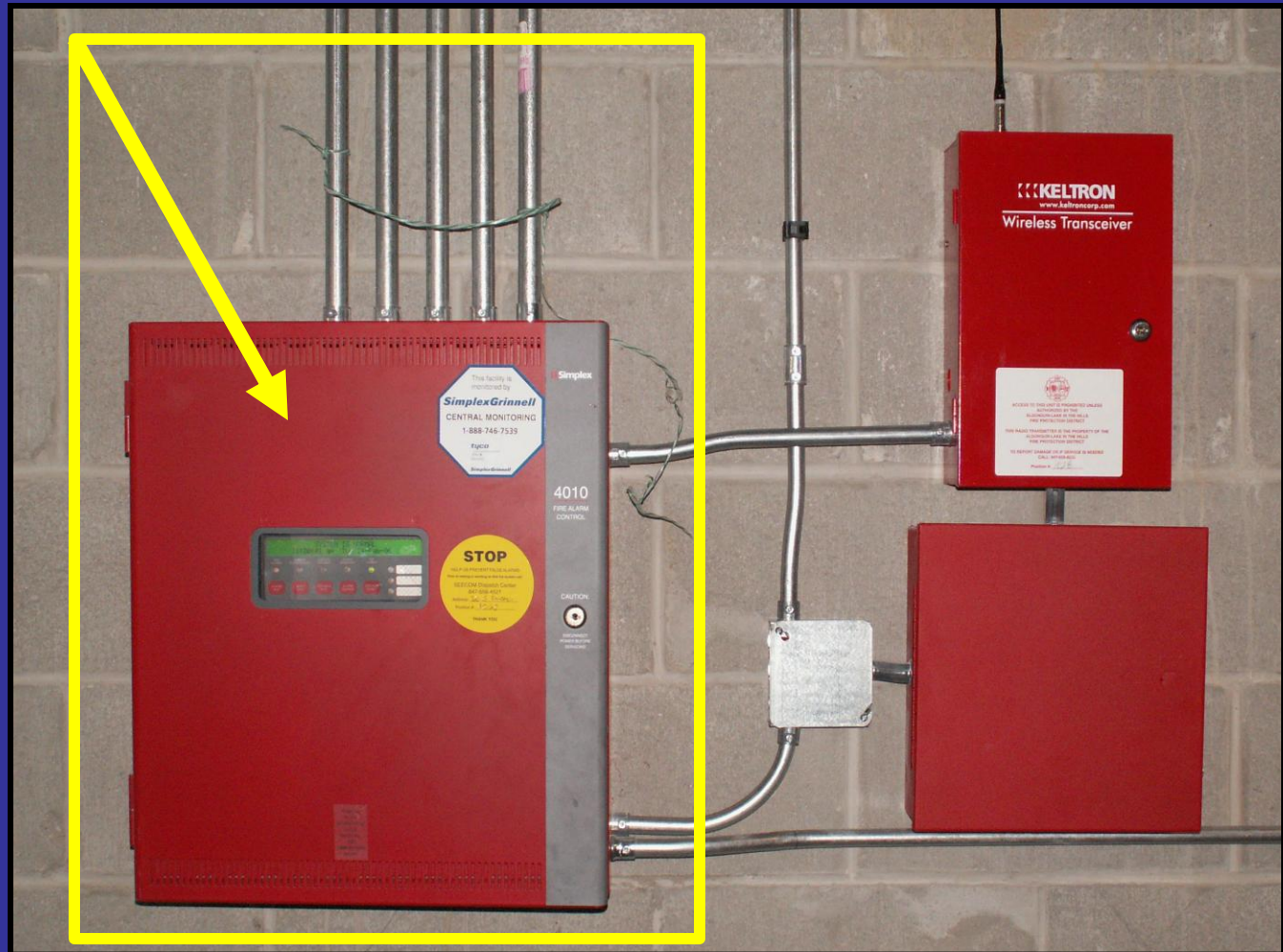


# CLWAN Pricing

- **Monthly monitoring fee will be locked at \$80.00 until May of 2013.**
- **Payment options of monthly, quarterly and annually are available.**
- **Cost adjustments will be made relative to CLWAN operational costs and will be evaluated against our market comparables.**



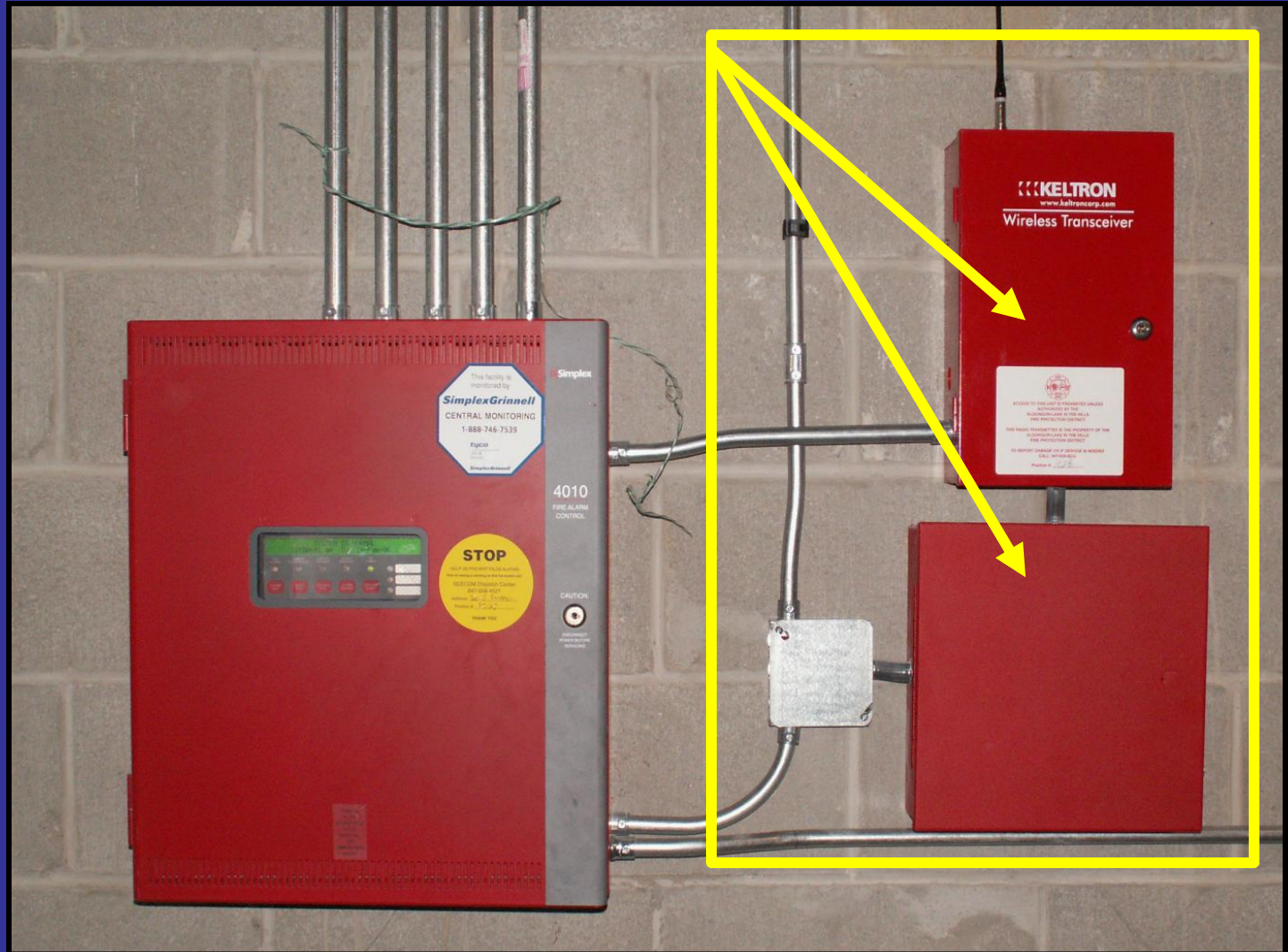
Existing fire alarm control unit currently in place and installed by the business' fire alarm contractor







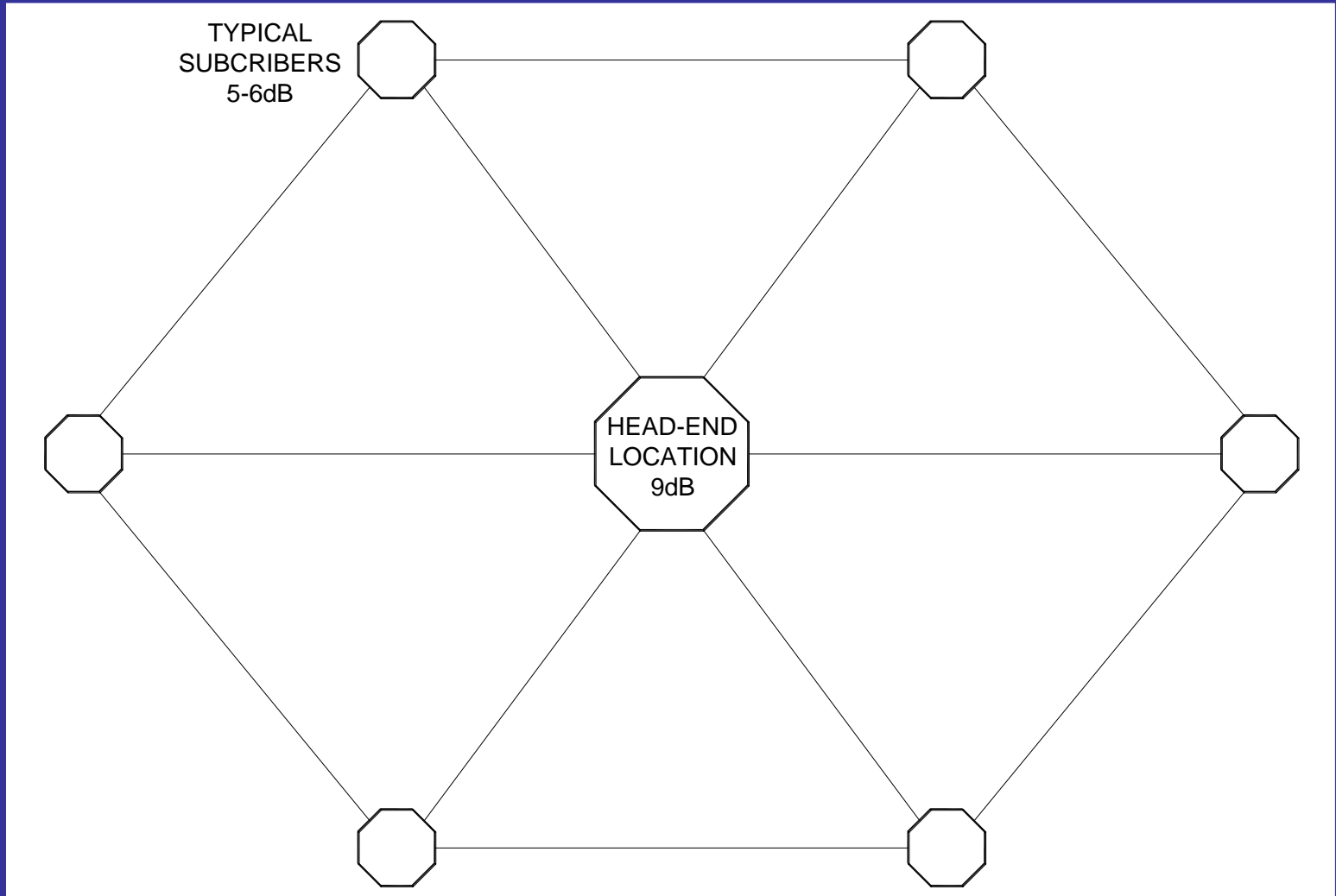
# New radio and accessories installed by the CLWAN authorized dealer





# THE NETWORK BACKBONE

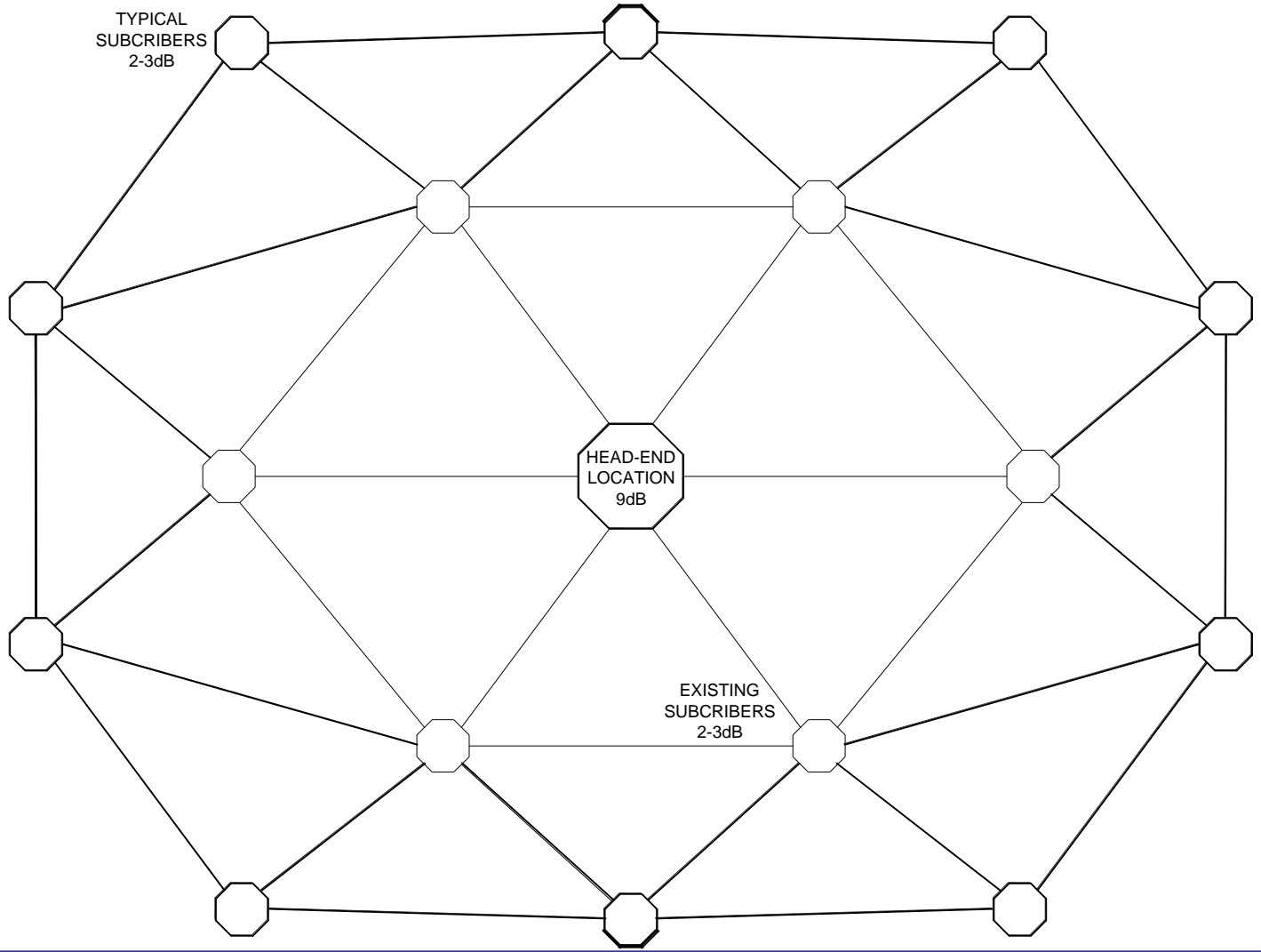
## Head-End and Municipal Sites





# THE NETWORK BUILT OUT

All Additional Radios Support the Overall Network



# Proposed Timeline

<b>Action Step</b>	<b>Time Period</b>	<b>Goal</b>
<b>Establish need for program</b>	<b>August 2009 – May 2010</b>	
<b>Advise City Manager and City Council of CLWAN plan.</b>	<b>July 2010</b>	
<b>Meet with Crystal Lake Chamber of Commerce to present purpose of CLWAN and obtain feedback.</b>	<b>July 2010</b>	
<b>Work with consultant to develop bid proposal</b>	<b>July 2010</b>	
<b>Send out bid packet for CLWAN</b>	<b>August 2010</b>	
<b>Present qualified bidders to City Council with suggested award.</b>	<b>September 2010</b>	
<b>Initiate CLWAN installation</b>	<b>November 2010</b>	
<b>CLWAN fully operational</b>	<b>July/August 2011</b>	





# Conclusion

The Crystal Lake Wireless Alarm Network offers you better service at a lower price.

Agency	Cost per month	Cost per year
ADT/AT&T	\$124.51	\$1,494.12
City of Crystal Lake	\$80.00	\$960.00
<b>Savings to customers</b>	<b>\$44.51</b>	<b>\$534.12</b>



*Questions?*





# Contact Information

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