



# **THE EMPIRE DISTRICT ELECTRIC CO.**

## **CUSTOMER SERVICE EXTENSION CHALLENGES**

*Chris Schafer – Distribution Design Manager*

*November 13, 2015*





# THE EMPIRE DISTRICT ELECTRIC CO.



## Investor-owned

- Established 1909
- Electric customers – 169,000
  - 8,100+ miles transmission & distribution lines
  - 1,326 megawatts (MWs) generating capacity
- Natural Gas customers – 43,800
  - 1,200+ miles transmission & distribution mains
- Fiber Optic & Water service

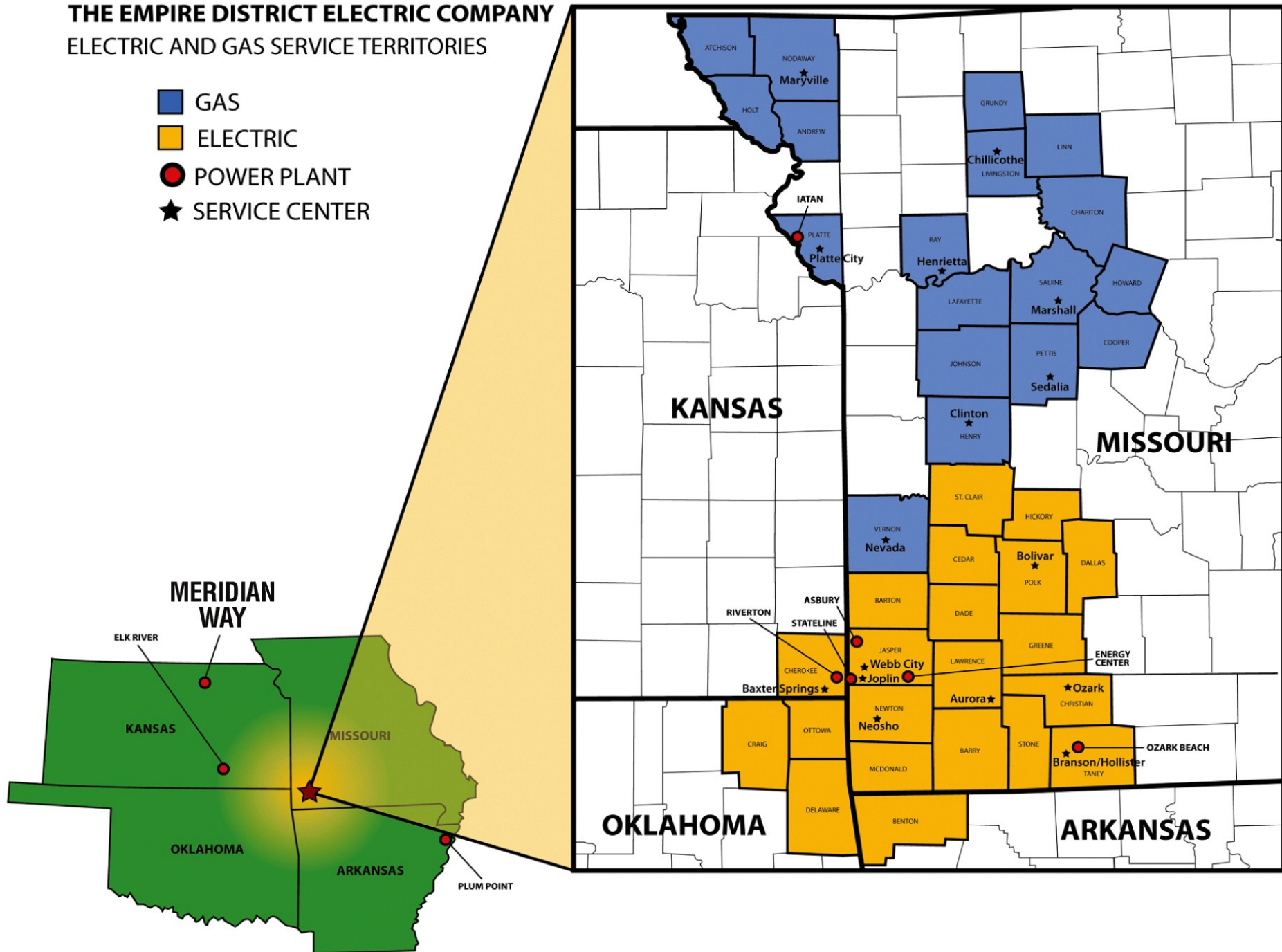


SERVICES YOU COUNT ON

# THE EMPIRE DISTRICT ELECTRIC COMPANY

## ELECTRIC AND GAS SERVICE TERRITORIES

-  GAS
-  ELECTRIC
-  POWER PLANT
-  SERVICE CENTER







# **RESIDENTIAL EXTENSIONS**

- **EDEC - 1000 ft. total overhead (OH) extension Footage, 300 ft. of that which could be off of a county road at no cost. Including Service & Transformers (average cost of OH is \$15 per ft.). Excess Footage charged per cost estimate (potential for refund 5 yrs.).** **Underground (UG) costs are UG minus OH costs for the extension footage allowed at no cost, then full price following that (average cost of UG is \$23 per ft.).**
- **New-Mac Electric COOP – Three (3) poles, two (2) guys and anchor, conductors and transformer installed at no cost. After that \$500 per pole and \$200 per anchor. UG costs are \$6 per ft. and the Customer supplies the ditch.**
- **Ozark Electric COOP – The first 300' at no cost. Excess footage is \$3 per ft. of OH. UG costs are \$4 per ft. and the Customer supplies the ditch.**
- **SW Electric COOP – OH is \$200 per pole, \$50 per anchor and the Customer clears the ROW. COOP supplies 100, 200 and 400 amp meter loops. UG costs are \$2 per ft. and the Customer supplies the ditch.**
- **WRVE COOP – Three (3) poles, transformer and up to 150 of secondary/service. Additional facilities will be \$300 per pole up to one half of a mile, thereafter the cost per pole is \$600. UG cost are \$5 per ft. for the first 1000 ft. with the Customer supplying the ditch, thereafter the cost is \$10 per ft.**
- **City Utilities of Springfield – Conduct an economic feasibility study on each extension.**



**SERVICES YOU COUNT ON**

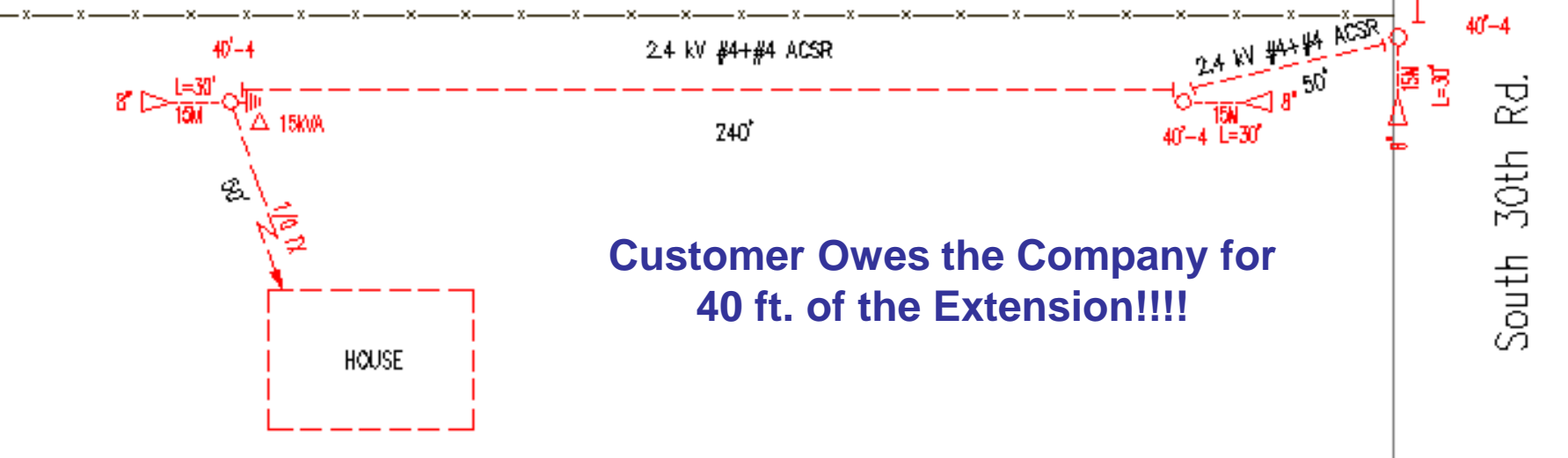
**1000 ft. Total Extension Footage, 300 ft of that which could be off of a county road. Including Service & Transformers.**

## 150 ft. Primary Along a County Road

## 50 ft. Service

**150 ft. Along the County Road + 340 ft. Off the County Road**

**40 ft. in excess of the 300 ft.**





# EXTENSION COMPARISONS

EXTENSION LENGTH	EDEC	NEW-MAC	OZARK	SW	WRVE
1000'	\$ -	\$ -	\$ 2,100.00	\$ 700.00	\$ -
2000'	\$ 15,000.00	\$ 1,500.00	\$ 5,100.00	\$ 1,350.00	\$ 900.00
3000'	\$ 30,000.00	\$ 3,000.00	\$ 8,100.00	\$ 2,000.00	\$ 1,800.00



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# **SUBDIVISION EXTENSIONS**

- **EDEC – The Developer/Customer pays the entire cost of installing electrical facilities UG into the subdivision including transformers and services. A refund is issued for each permanent residential meter installed per lot for up to five (5) years.**
- **New-Mac Electric COOP – Three (3) poles, two (2) guys and anchor, conductors and transformer installed at no cost. After that \$500 per pole and \$200 per anchor. UG costs are \$6 per ft. and the Customer supplies the ditch.**
- **Ozark Electric COOP – The first 300 ft. at no cost. Excess footage is \$3 per ft. of OH. UG costs are \$4 per ft. and the Customer supplies the ditch.**
- **SW Electric COOP – OH is \$200 per pole, \$50 per anchor and the Customer clears the ROW. COOP supplies 100, 200 and 400 amp meter loops. UG costs are \$2 per ft. and the Customer supplies the ditch.**
- **WRVE COOP – Three (3) poles, transformer and up to 150 of secondary/service. Additional facilities will be \$300 per pole up to one half of a mile, thereafter the cost per pole is \$600. UG cost are \$5 per ft. for the first 1000 ft. with the Customer supplying the ditch, thereafter the cost is \$10 per ft.**
- **City Utilities of Springfield – Conduct an economic feasibility study on each extension.**



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# **NON-RESIDENTIAL EXTENSIONS**

- **EDEC** – A three (3) year revenue test is applied towards the cost estimate of the electrical extension (OH or UG). If the extension costs are in excess of the three (3) year revenue test then the Customer pays the difference.
- **New-Mac Electric COOP** – No charge for OH and no distance limit. **UG costs are \$6 per ft. plus cost of trench for single-phase and \$18 per ft. plus cost of trench for three-phase UG.**
- **Ozark Electric COOP** – The first 300' at no cost. Excess footage is \$3 per ft. of OH. **UG costs are \$4 per ft. and the Customer supplies the ditch.**
- **SW Electric COOP** – OH is \$200 per pole, \$50 per anchor and the Customer clears the ROW. COOP supplies 100, 200 and 400 amp meter loops. **UG costs are \$2 per ft. and the Customer supplies the ditch.**
- **WRVE COOP** – Three (3) poles, transformer and up to 150 of secondary/service. Additional facilities will be \$300 per pole up to one half of a mile, thereafter the cost per pole is \$600. **UG cost are \$5 per ft. for the first 1000 ft. with the Customer supplying the ditch, thereafter the cost is \$10 per ft.**
- **City Utilities of Springfield** – Conduct an economic feasibility study on each extension.



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# **COMPETITION - ITEMS OF INTEREST**

- **EDEC's Competitors are not regulated by the Missouri Public Service Commission (PSC) and therefore are not required to follow their written extension policies. Price themselves below our extension policies requirements.**
- **EDEC is Protected against competition with Cooperatives when new Customers are located within the city limits of a municipality we serve that's population is in excess of 1,500 people. Does not include municipal utilities.**
- **EDEC competitors have worked with cities in allowing the developer to choose their utility before property is annexed.**
- **Municipal utilities have leveraged other services such as natural gas to compete with us. Since we don't offer that service in our electrical territory we can't compete.**
- **EDEC competitors offer emergency generation systems as leverage.**



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# **COMPETITION FOR SCHOOLS**

- **EDEC pays property taxes, as well as railroad and utility tax on our electric facilities and many other companies do not. When EDEC installs new facilities, the school receives added tax revenues.**
- **EDEC doesn't give facilities or services to Customers in which the cost is not justified as per our rules and regulations with the Missouri Public Service Commission. EDEC's standard practice is to charge the customer requesting the service instead of spreading the burden onto customers who don't receive any benefit from the request.**
- **EDEC, as a power generator, has been proactive in preparing our facilities for the current EPA mandates. EDEC is working to be proactive, both with our energy mix and expected environmental regulations and we do support the least cost options in those proposed government plans.**



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# EXISTING BUILDING 3-PHASE SERVICE CHANGES

Where Customer load is added the three (3) year revenue test is applied.

- 400 Amp 120/208 Volt (150kVA) - \$ 8,760
- 400 Amp 277/480 Volt (500kVA) - \$17,236
- 600 Amp 120/208 Volt (300kVA) - \$13,111
- 600 Amp 277/480 Volt (500kVA) - \$18,065
- 1200 Amp 120/208 Volt (500kVA) - \$20,191
- 1200 Amp 277/480 Volt (1000kVA) - \$25,167

\* 50 ft. Service from Existing Primary OH Facilities \*



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# DEVELOPMENT FOLLOWING TORNADOS



SERVICES YOU COUNT ON





# MERCY HOSPITAL



SERVICES YOU COUNT ON



# JOPLIN HIGH SCHOOL



SERVICES YOU COUNT ON



# **JOPLIN TORNADO**

**MAY 22, 2011**

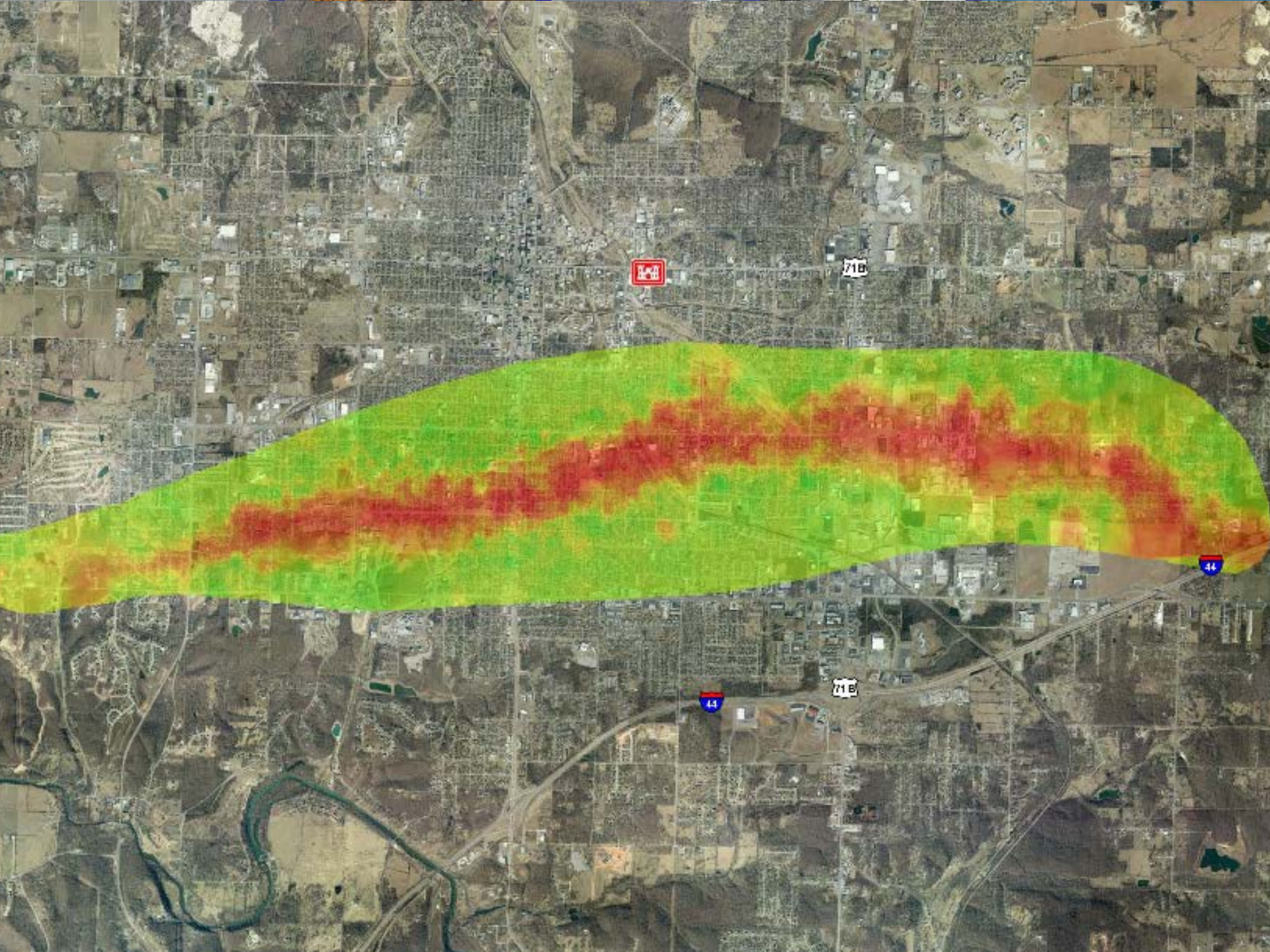
## **F5 Tornado**

- **Wind speeds in excess of 200 mph**
- **Vortex nearly one mile wide**
- **Traveled 22.1 miles**
- **Claimed 162 lives / over 1000 injured**
- **Costliest single tornado in U.S. history (\$2.8 Billion)**



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# RECOVERY MAP



# **BRANSON TORNADO**

## **FEBRUARY 29, 2012**

### **F1-F2 Tornado**

- **Wind speeds between 60-70 mph**
- **Along State Route 76**
- **No lives lost**



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# REBUILDING







# ??QUESTIONS??



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