



# Everygy: Roeland Park





# Strategic Priorities and Focus

## CORPORATE STRATEGY



### Strategic Focus

#### Reliability

Improved resiliency and reliability for customers  
Flexible grid to enable demand transformation

#### Affordability

Productivity enhancements and technology  
deployments to lower costs and improve service  
Growth-driven improvements in affordability

#### Sustainability

Advancing clean energy while ensuring reliability  
and affordability  
Defined pathway to responsible fleet transition and  
necessary transmission infrastructure

### Strategic Priorities



Mission | We empower a better future.

Vision | To lead the responsible energy transition and provide affordable,  
reliable and sustainable service to our customers and communities.

Our People-  
First Values |



Safety



Integrity



Ownership

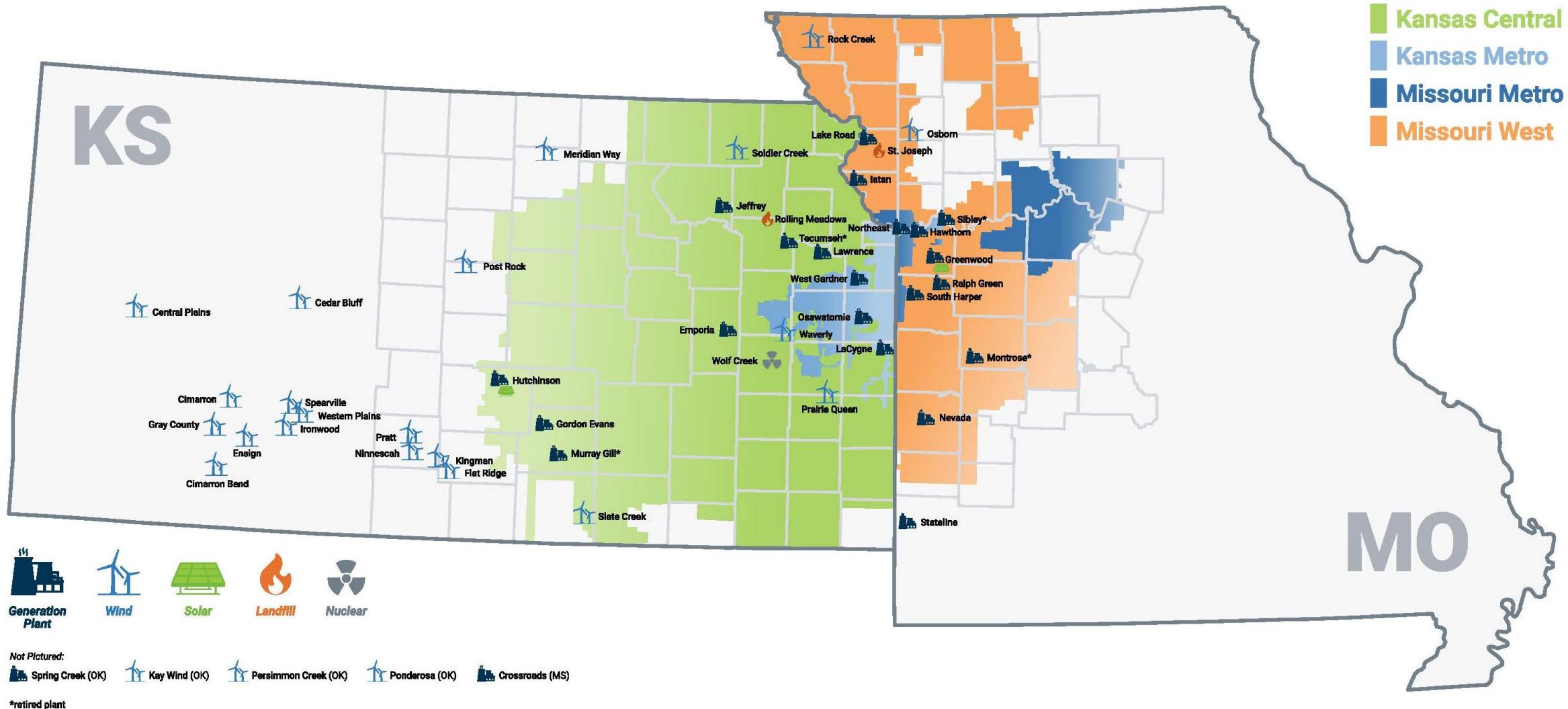


Adaptability

**Evergy is focused on driving a continuous improvement culture that consistently delivers against our affordability, reliability and sustainability objectives.**



# Combined Service Area





# Who We Serve

## Evergy Customer Profile

~1,422,000  
RESIDENTIAL CUSTOMERS



~192,000  
COMMERCIAL CUSTOMERS



~7,000  
INDUSTRIAL CUSTOMERS



Rate Base **Kansas**  55%

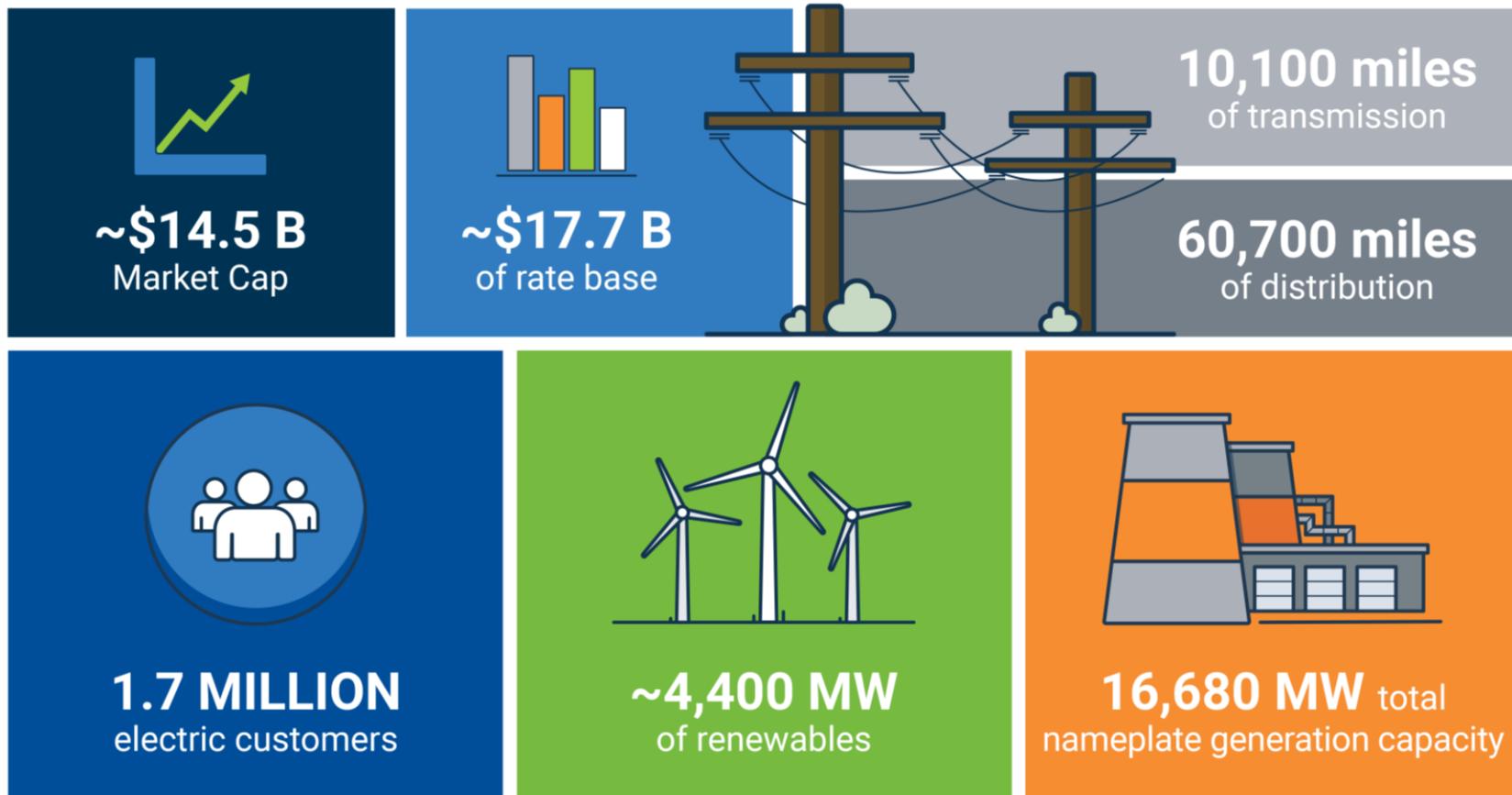
Rate Base **Missouri**  33%

Rate Base **FERC**  12%

Statistics as of 12/31/20.



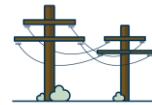
# Evergy By the Numbers



All as of YE 2022.



# Focused on Reliability & Operational Excellence



Modernizing transmission and distribution lines



Investing in smart grid technologies



Innovating vegetation management practices

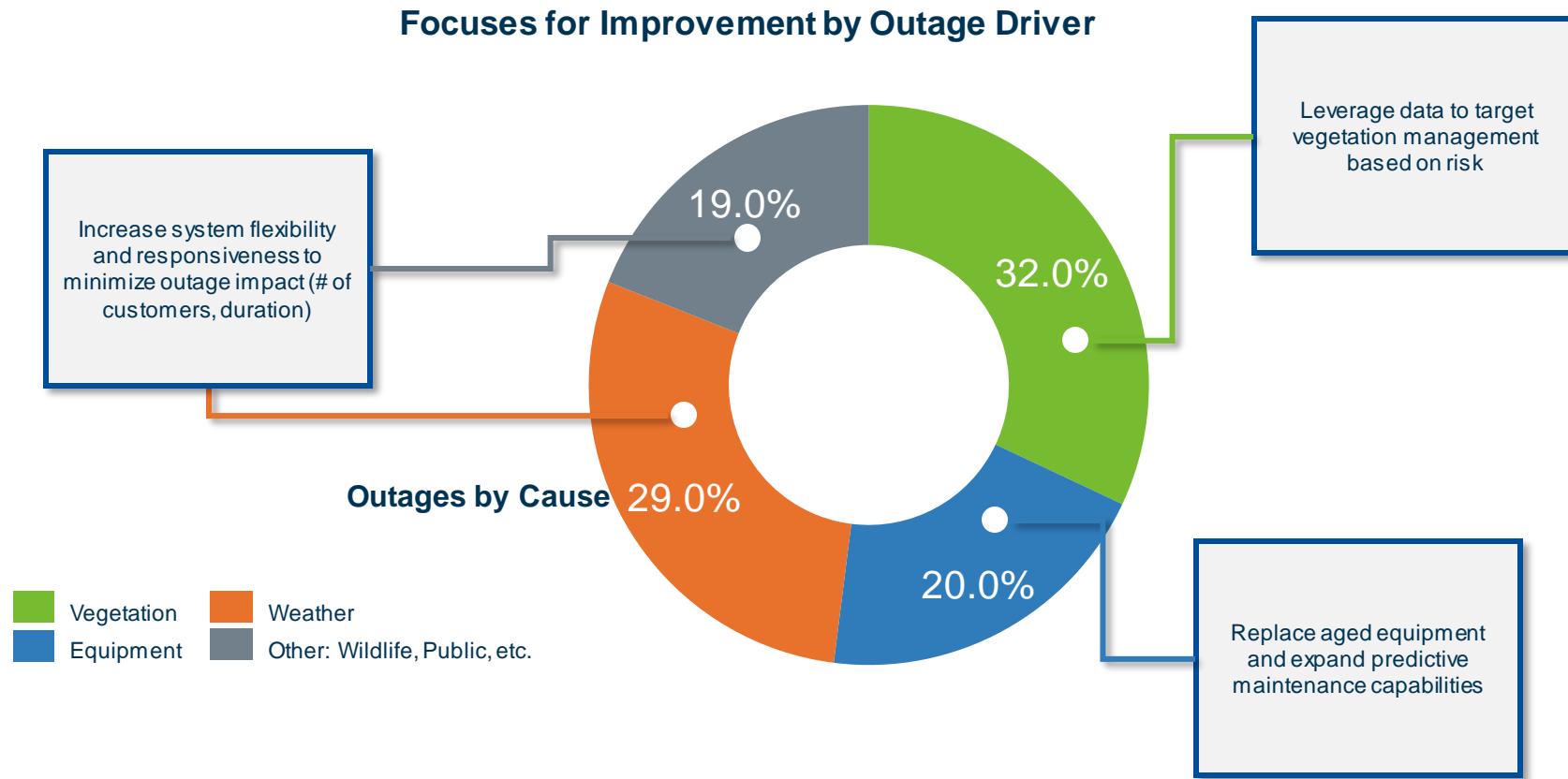


Focusing on seasonal generation flexibility to meet demand in peak seasons

*Targeting top-tier performance in reliability, customer service and generation through grid modernization and continuous improvement in operations.*



# Customers Require Reliability



*Targeting ongoing reliability improvements and sustained top quartile performance.*



# Transmission Reliability & Resiliency

*Replacing aged transmission lines to increase resiliency against severe weather and prevent equipment failures*



*Targeting high impact, with high-risk transmission asset replacements*

***Investing in transmission infrastructure to create a more reliable and resilient backbone and to support the grid through the ongoing energy transition.***

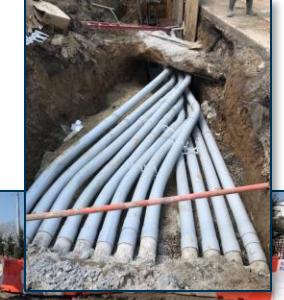


# Distribution Reliability & Modernization



*Rebuilding miles of aged overhead distribution lines and replacing aged substation assets to support customer reliability*

*Replacing assets that serve critical loads like healthcare and local community emergency management services*



***Distribution investment targeting low-performing equipment and replacing aged, near end-of-life assets in order to deliver sustained Tier 1 reliability for our customers.***



# Construction Improvements



## **Roeland Park Substation Expansion and Upgrade**

To accommodate future load growth and to complete an upgrade in the area

### **Roeland Park substation is under construction.**

That work looks like:

- Replacing or updating aged infrastructure dated back to the 1960's.
  - This includes five distribution switchgears.
  - Transmission circuit switchers, breakers and switches.
  - A new transformer.
- Adding a sixth distribution switchgear to support future load growth.

The switchgears will include new distribution breakers to improve reliability, all updated relaying and wiring.

## **Kenilworth Substation Upgrade**

To complete an upgrade in the area

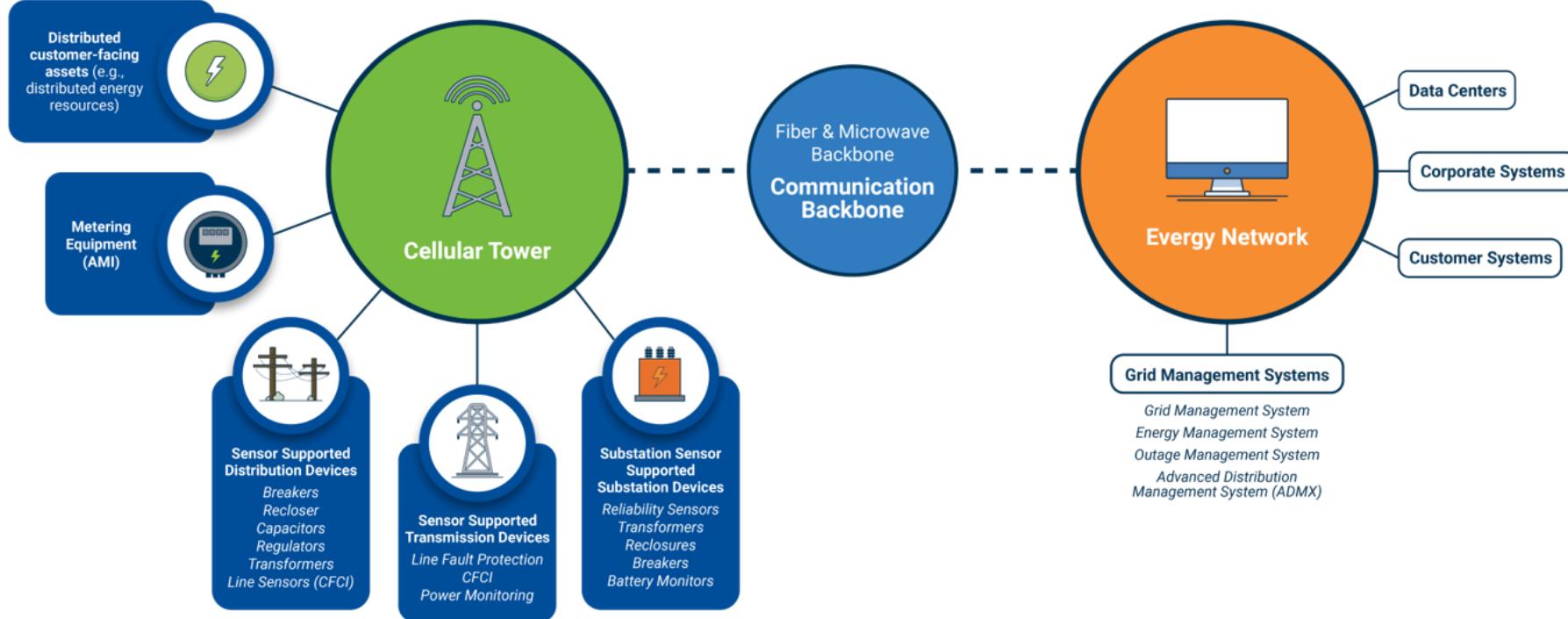
### **Kenilworth Substation is under construction.**

That work looks like:

- Replacing or updating infrastructure aged around sixty years.
  - Including:
    - Two switchgears, added all new distribution breakers and relaying.
    - One circuit switcher and two transformers.
    - Two transmission breakers and two more switchgears this fall.



# Energy Has Started Transforming Our Grid



Deploying these technologies will allow Evergy to better manage the grid, provide more real-time information and enable smoother integration of distributed energy resources.



# Tree Trimming Process

- We work year-round to manage the impact of trees on power lines. Our tree trimming program helps reduce the impact of vegetation on lines.
- Our specially-trained team of utility foresters, supervisors and contractors maintain more than 37,000 miles of Evergy lines, which we inspect and address to eliminate potential issues.
- We let you know if maintenance is needed at your property with a door notice that provides more detail and contact information.
- Tree trimming guidelines take into account the tree's proximity to power lines, size, species, health and growth rate.
- Crews generally visit circuits once every four to five years.

- **Requesting a Line Clearance**
- Customer requests for assistance of trimming/removal of trees near Evergy lines is available at [evergy.com/TreeTrimRequest](http://evergy.com/TreeTrimRequest).

## Tree Work Required

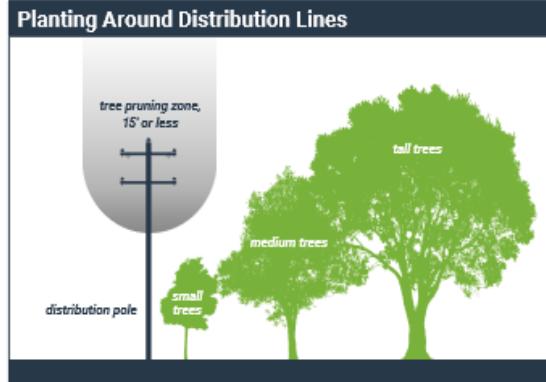
***There is no charge for this service***

As part of Evergy's commitment to supply safe, reliable electric service, contractors will visit your property to maintain trees/branches that could interfere with power lines.

Our specially-trained utility foresters have identified trees requiring maintenance. Our tree trimming contractors will use arboricultural practices supported by industry standards and tree care professionals.

Trees requiring work are marked with orange paint:

- Single Dot = Side Trim/Crown Reduction
- Double Dot = Good Removal Candidate
- Long Orange Line = Small volunteer trees that will be cut down



If you have any questions about the work required on your property, please call us at the number below within the next five days.

Evergy Representative

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Phone Number

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# Annual Maintenance Cycles

- Tree Trimming on a Preventative Maintenance Cycle:
  - 4-year cycle in Urban areas
  - Mid-cycle Inspections to ensure reliability for duration of cycle
  - Process:
    - **Plan:** Utility Forester inspects circuit from top to bottom to identify each individual tree for trimming.
    - **Notify:** Customer's notified in advance of tree crews and work orders created.
    - **Trim:** Tree crews mobilize and execute work orders
    - **Audit:** Inspection to ensure trim work carried out according to work orders, quality of workmanship, effective tree to conductor clearance.
  - Customer initiated follow-ups initiated via Contact Center (~over 10,000/yr)
- Poles—Intrusive inspections every 12 years
- Overhead line Patrols—every 4 or 6 years (metro or rural)
- Pad-mount Equipment—every 4 or 8 years (visual and detailed)
- Every 12-years urban facilities are inspected a minimum of 4-times, 3x with OH patrols and 1x with intrusive pole inspection

# Outage Information



# Outage Cause and Prevention

## Weather is the cause of most power outages

More than 70% of power outages are weather-related, including storms, high winds, lightning and ice. But they aren't the only causes; outages can happen at any time of the year. Animals gnawing into and making contact with wires, car accidents and human error can also cause outages. Damage from weakened trees can result in a loss of power weeks after a severe-weather event. Occasionally, shorter outage periods are necessary to accommodate installation efforts for other providers, including high-speed internet.

## Wildlife prevention equipment

We care for wildlife and don't want to see them get hurt on energized equipment or disrupt power for our customers. One challenge with wildlife related power outages is that different areas of our service territory have different wildlife problems. In some areas, birds may be the problem, while in others it might be raccoons, snakes or squirrels.

## Predictive maintenance

Predictive maintenance (PdM) technologies allow Evergy to detect problems closer to when they occur. This helps prevent more serious problems and power outages that require unplanned maintenance. PdM such as infrared thermography (IR), Corona, Dissolved Gas Analysis (DGA) and Doble testing processes help to test equipment health.



# Restoration process

Power sometimes returns in a different order than you'd expect. We have a process in place to address critical needs first then the largest number of customers as quickly and safely as possible.

## **Here's what happens as outage reports come in:**

- Troubleshooters and sometimes damage assessment crews are sent to investigate the outage cause. This is why you may see an Evergy vehicle come and leave your neighborhood without power being restored.
- Crews then repair or replace equipment as needed, removing all hazards.
- Many times, tree trimming crews must remove trees or tree limbs before power can be restored.
- Following a major storm, sometimes it's a matter of completely rebuilding parts of the electrical system to restore services, which can take lots of coordination and many hours to complete.



# Lateral Conversion Options

Usage rates are based on overhead design

**New underground** subdivision costs are paid by developers.

Existing neighborhoods can be **converted to underground**.

- Conversion costs are paid by involved customers
- Evergy performs all 12,000 Volt work
- Customer's contractor performs conduit work from line to house
- Evergy installs all cables

Costs vary greatly.

- Example diagram:
  - Roughly \$200/foot for 12,000 Volt lines
  - Typical pole-pole distance = 80-100 ft
  - Estimated customer's conduit work \$2,000
  - Each Customer: \$2,000 + (\$27,000/5 houses)

The above does not include work or cost of attachers such as cable, phone, etc.



# Outage Map Features



## 1 Search

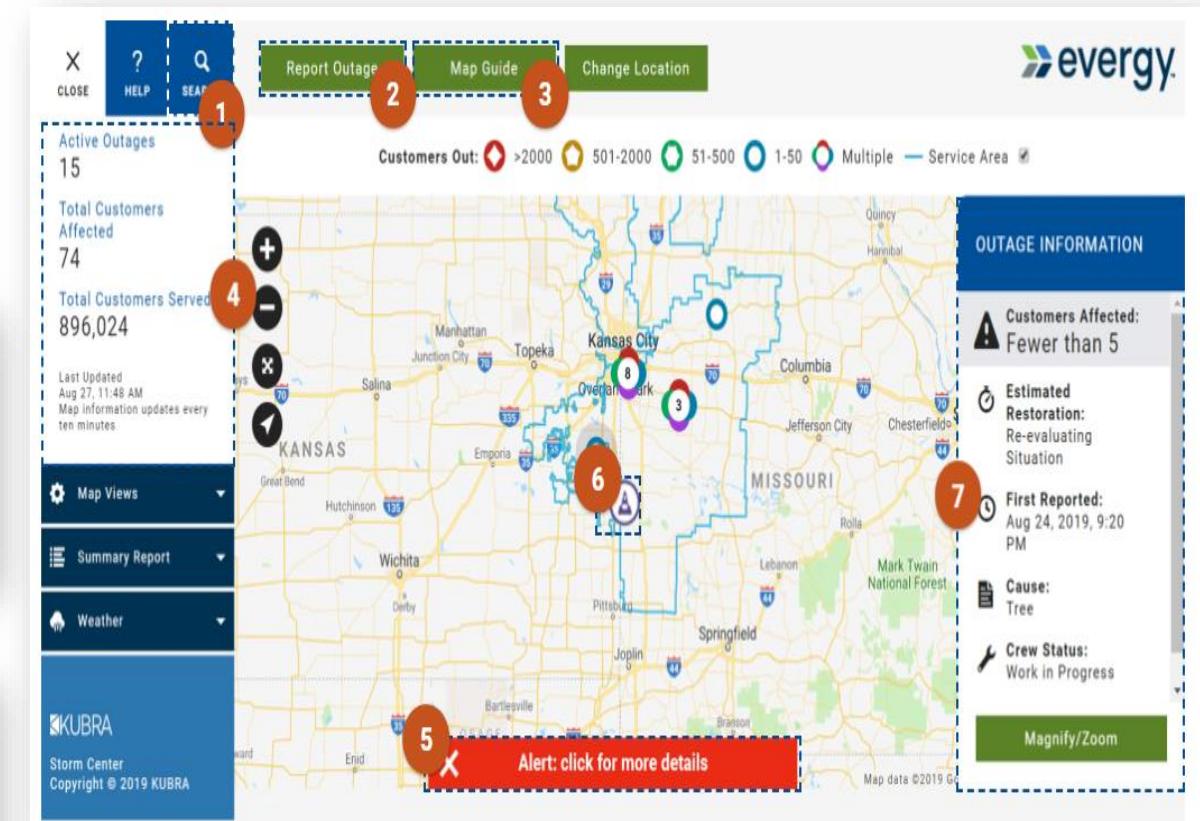
Search allows you to type in your address or general location. After typing in your information, click the location you want to view and the outage map will shift to your location and place a blue flag there.

## 2 Report Outage

The orange Report Outage button allows you to immediately report your outage online.

## 3 Map Guide

Map Guide takes you to a walk through of the outage map and its features, so you can use it with ease.



## 4 Tools

The Tools section shows you active outages, customers affected and total customers served. It also allows you to switch Map Views from locations to city, county or zip code. The Summary Report gives a table-like breakdown of customers affected and served by state, which you can change to city, county or zip code view. Lastly, the Weather tool lets you view or loop the radar to see what's currently going on in your area.



# Outage Map Features

## 5 Alert Banner

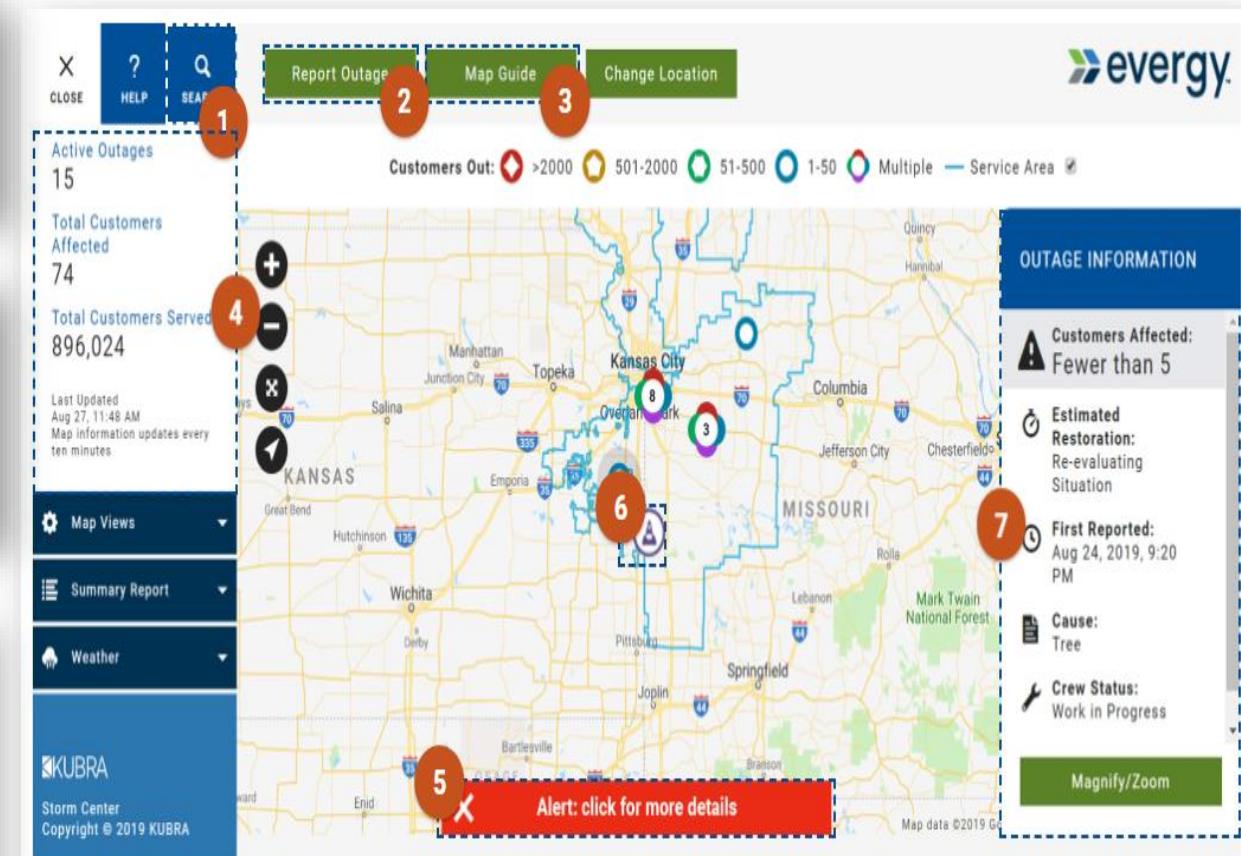
The Alert Banner appears in a situation where you may need to know widespread outage information or updates. You can click on the banner to read more information.

## 6 Icon

An Icon may appear on the map for things like a hazard, dry ice truck (in summer outage situations), warming centers (in winter outage situations) or relevant photos of crews and outages.

## 7 Outage Info

When you click on an outage within the map, you'll be presented with Outage Info that shows your estimated restoration time (as long as there's not a severe storm or outage situation preventing us from knowing a restoration time). We'll also show you when your outage was reported, a cause (if it's been identified) and if a crew is on their way or working on your outage.





# How are we Improving Customer Experience?

*As of end of year 2022*

- Enhanced customer experience includes investments in core systems to improve ways we meet customers' needs
- Utilizing customer data and preferences, we want to deliver an omni-channel customer experience

