Tacoma Power is a public utility company providing power to local businesses and neighbors in Tacoma and surrounding areas of Washington State. Severe weather conditions can damage poles and power lines used for power distribution resulting in outages. Tacoma Power handles outages and damages using an Outage Management System (OMS) to report, repair, and record them. Most of their damage and outage documents are currently recorded manually. Our project was to make this manual process more efficient with the help of software.

**Background**

- Digitize the assessment forms.
- Ability to view poles on a map.
- Add photos to forms.
- Offline capabilities.
- Autofill available form data.
- Easy to read interface.
- Simplified user interface.
- Make app user specific.

**Objectives**

- Complete overview of repair.
- Increase organization.
- Rapid updates for entire organization.
- Improve efficiency.
- Update system to the digital age.

**Impact**

- Assessment Form: The current paper method to store description of damage.
- Map: Geolocation information needed for repair.
- Route: A set navigation to find the source of an outage.

**Future Work**

- User authentication.
- Use general public outage reports to help create assessor routes.
- Automate navigation for assessors and repair crews.
- Implement more information security.

**Glossary**

**Assessment Form:** The current paper method to store description of damage.

**Map:** Geolocation information needed for repair.

**Route:** A set navigation to find the source of an outage.

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