Client Overview
Ramsey County, Minnesota has a population of over 540,000, making it the second-most populous county in Minnesota. Established on October 27, 1849, it was one of the nine original counties of the Minnesota Territory. Named for Alexander Ramsey, the first Governor of the Territory, Ramsey County provides government services to 200,000+ residential customers and 13,000+ businesses in an area covering 441 square miles.

Challenges
Ramsey County’s external payment system application (ePay) allows county residents to view and pay their property taxes online. “We needed a simple solution with 24x7 availability that met payment card industry compliance requirements to interface ePay with another external system,” says Mike Piram, ERP Program Manager at Ramsey County.

Solutions
Amazon Web Service (AWS) was chosen because of the cloud service’s high-availability options, low-cost model, and the ease of service delivery. Ramsey County’s ePay application timeline quickly moved through the delivery model beginning in early fall of 2017 and moved to production in November 2017. The County deployed components of ePay in the AWS Cloud using its extensive options and impressive suite of security services. The architecture leverages Amazon Elastic Compute (Amazon EC2) in multiple availability zones, with AWS Elastic Beanstalk controlling the deployment stack for an auto-scaling, hands-free, and immutable infrastructure. Data in transit is encrypted using SSL to each EC2 instance, leveraging AWS Certificate Manager to provision and manage the certificates. Amazon Simple Storage Service (Amazon S3) provides a secure, durable, and highly scalable object storage.

Results
Ramsey County was able to realize the benefits of the cloud and create a highly available application architecture for components of this critical application. Ramsey County now has the capability and agility to leverage AWS for other critical applications as part of its cloud strategy and continues using Sierra-Cedar as its fully hosted cloud provider.

Key Project Highlights:
- Met compliance requirement
- 24x7 availability with zero downtime
- Automatically scales for peak workloads
- End-to-End encryption in transit
- Automated deployment stack