Disaster Recovery
Parallel Payroll Exercise Overview

A disaster can bring San Francisco to a standstill in mere minutes. Yet it takes years of hard work, planning, dedication and interdepartmental cooperation to ensure that the City can run its mission critical functions after a disaster strikes.

What Can Impact Payroll Processing in a Disaster

- The viability of PeopleSoft HCM
- The integrity of the data
- The day within the payroll processing schedule disaster struck
- What departments processes were affected by the event

Today I am here to discuss with you the disaster recovery (DR) efforts that of the Office of the Controller has been working in the last few years to achieve our goal of paying over 34,300 employees of the City and County of San Francisco in a timely manner no matter when and where a catastrophe occurs.

Disaster Recovery Solution

- ## Background

  The preparation for this payroll exercise began 3 years ago when the infrastructure was put in place. A dedicated project from the Department of Technology (DT) was assigned to spearhead the interdepartmental tasks and see the testing through. This project manager coordinated the all the resources and tasks completed by eMerge, PPSD and DT. The team worked tirelessly to lay the technical groundwork to ensure that the City and County of San Francisco will be able to process payroll should a catastrophe occur.

- ## 200 Paul Datacenter
  - Primary datacenter located in San Francisco
  - Core Network Hub for DT and Broadband providers
  - DT's primary data center so DT staff can monitor user activity from internet to database

- ## Rancho Cordova
  - Not in San Francisco's Geologic Zone: diversified risk
  - Far but not too far: City staff can get to datacenter
  - Tier III Certified data center (highest level)
  - State's primary datacenter (OTECH) – other systems hosted here are DMV, Lotto, Justice, State Payroll, Health, etc.

Where is Rancho Cordova?
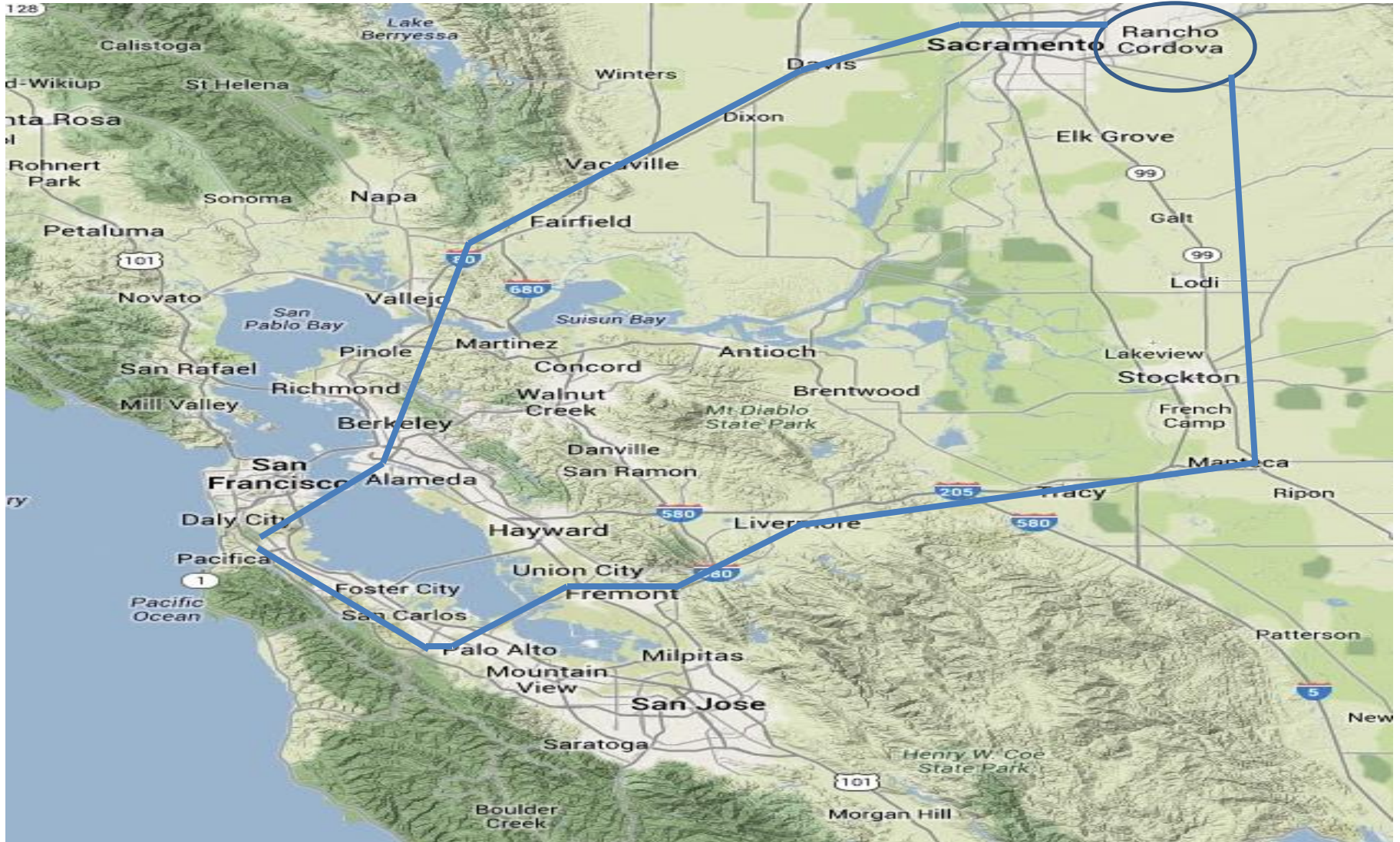
RC and SF are connected by redundant network connections [3]

Objective/Scenario/Scope

- Objective

 A disaster exercise was performed in February 16, 2017 to test the readiness and resiliency of the Controller's DT servers, ensuring the backup system would be able to run critical payroll processes.

- Scenario

 The Controller's main payroll processing servers at 200 Paul St. had been offline for more than a day and the team had only hours to run the necessary queries, processes, reports, and validations before sending pay files to U.S. Bank and others via the backup servers located in Rancho Cordova.

- Scope

 Key staff from PPSD, eMerge and DT gathered early in the morning on February 16th to run the payroll process for PPE 2/10/2017. The DR infrastructure was activated and PPSD personnel ran all the required payroll processing tasks including pay calculation, pay confirm, and generate post-payroll interfaces and reports as required.

Exercise Results

- DR Exercise started as planned at 8:00 AM
- DT DBA disabled the replication between the Production systems at 200 Paul and DR at Rancho Cordova
- CON eMerge Application Administrators team brought up the DR System
- PPSD executed the Payroll Processing in DR
- Generate payroll pre-confirm reports. Okay to run final calc and confirm for DR - **Confirmation received from Payroll Director**
- Complete pay confirm process in DR
- DR Test completed at 6:00 PM
- Post DR Test Activities completed at 6:20 PM
- At the same time the rest of the PPSD team completed the Payroll process from the Production servers at 5:00pm

What the Controller's Office is Doing to Prepare for DR

- Plan more Disaster Recovery exercises which will include integration with the new Financials PeopleSoft system

- Maintain backup servers at Rancho Cordova

- Work with vendors to ensure availability of inbound and outbound interface files

- Use of VPN and IAM for user access and authentication

- Provide Training to Finance & Administration staff (semi-annually in April and September) to learn about DOC tools and how to apply them to aid in recovery costs associated with emergency response and recovery.