

# Colorado Crime Information Center (CCIC)

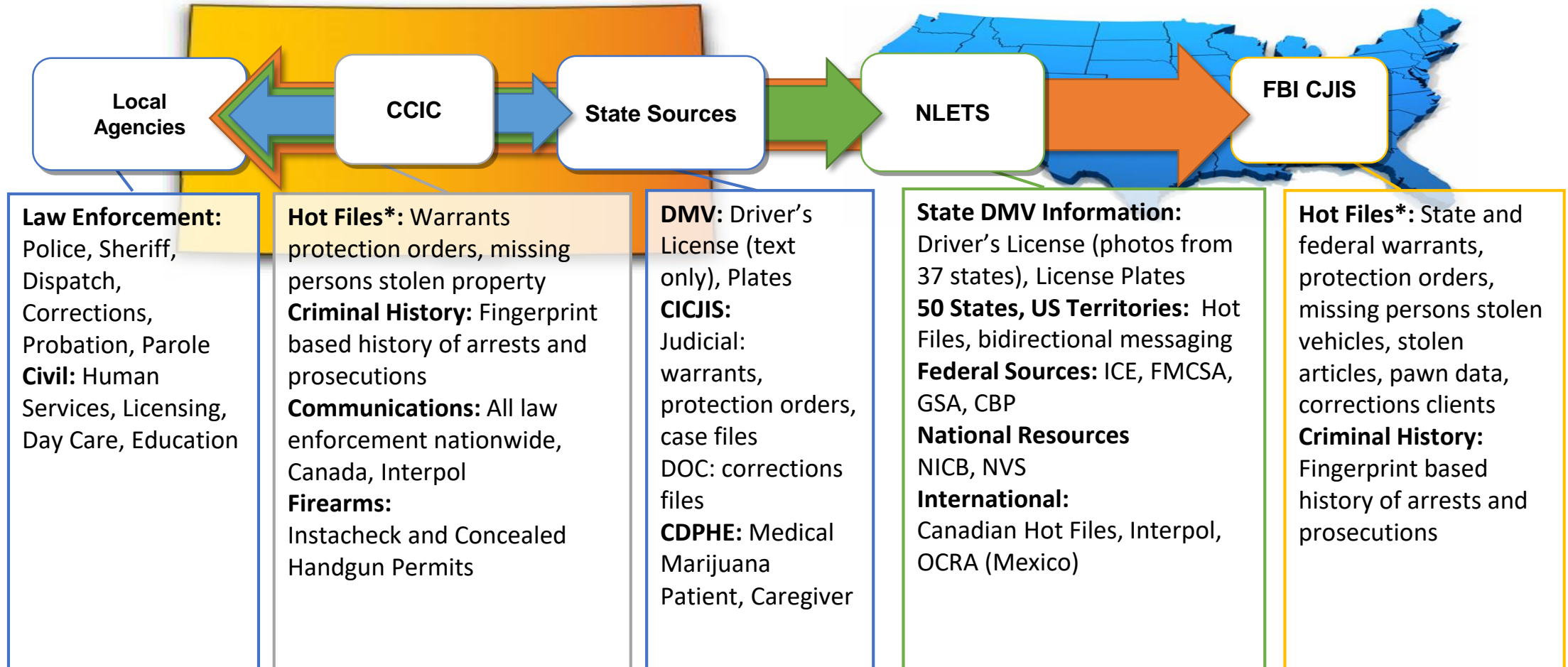


# Agenda

- CCIC Overview
- Security and CISO Role
- Current System Issues
- Project Scope
- Server costs, budget
- Project Rough Schedule
- Payback Period

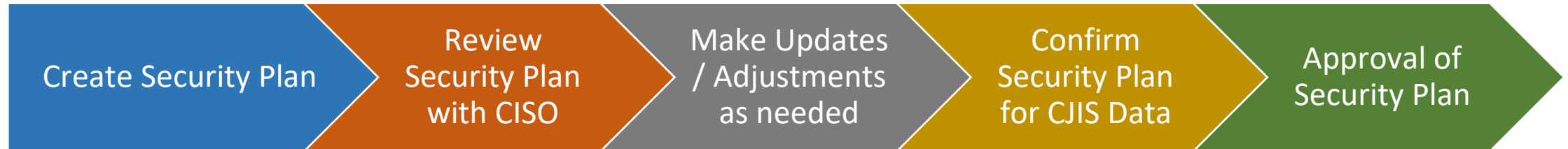


# CCIC Overview



# Security and CISO Role

- CBI works actively with OIT and CISO for security review



- Project System Security Plan is approved by the Security Office (CISO) before any project can move into a production environment.



# Current System Issues

- CCIC has experienced several issues lately due to failing hardware.
- Here is a list of issues we have experienced over the past two years, most of which are hardware related; much of the old hardware is out of date and hard to find replacements.

DATE	OUTAGE?	ISSUE
12/1/2017	NONE	SAN STORAGE - <b>BAD DRIVE REPLACED</b>
4/18/2018	NONE	SAN STORAGE - <b>BAD DRIVE REPLACED</b>
4/24/2018	NONE	SAN STORAGE - <b>BAD DRIVE REPLACED</b>
8/15/2018 - 8/22/2018	NONE	DISASTER RECOVERY - IBM ADVANCED MANAGEMENT MODULE. IBM REPLACED 2 CISCO ETHERNET SWITCHES INSIDE BCH. I/O MODULE HAD A BAD CARD.
10/2/2018	NONE	SAN STORAGE - <b>BAD DRIVE REPLACED</b>
2/4/2019 - 4/10/2019	NONE	CANNOT ACCESS DISASTER RECOVERY NETWORK FROM PRODUCTION. WORKED WITH IBM CE THAT WAS ONSITE(SWITCHES). HE ASSISTED IN SWAPPING ETHERNET CABLES SINCE IBM NO LONGER SUPPORTS.
5/28/2019	NONE	SAN STORAGE - <b>BAD DRIVE REPLACED</b>
6/11/2019	NONE	SAN STORAGE - <b>BAD DRIVE REPLACED</b>
8/5/2019	NONE	SAN STORAGE - <b>BAD DRIVE REPLACED</b>
8/27/2019	NONE	SAN STORAGE - <b>BAD DRIVES(2) REPLACED</b>
9/2/2019	OUTAGE 30MIN	COSC <b>BLADE FAILED OS DISK</b> . HAPPENED TO HAVE A SPARE AT CBI. REPLACED WITH TELEPHONE HELP FROM CPI.
10/20/2019	OUTAGE 120MIN	COPB <b>BLADE FAILED</b> . LOST IP ADDRESSES. RESTARTED BLADE. CICJIS, CLEIN, COG TRANSACTIONS DOWN
10/20/2019	NONE	SAN STORAGE - <b>BAD DRIVE REPLACED</b> . OTHER DRIVES WERE INCOMPATIBLE.

# Project Scope

## **What we're already doing (within existing budget)**

- Move Production of CCIC to Computer Projects of Illinois' (CPI) Cloud Facility
- Maintain CCIC current software
- Original Plan was to replace full system hardware onsite (\$15-20M)

## **What we're asking to do (with your approval)**

- Replace onsite hardware as a backup for CCIC
- Disaster Recovery located onsite at 690 Kipling
- Virtualization of desktops
- New Plan to upgrade to cloud and only replace backup hardware for Disaster Recovery onsite (\$2M)

# Server Costs and Budget

Item	Total	Description
Hardware	\$ 647,390	CCIC Replacement Hardware which will be the Cloud-based solution backup
Virtual Desktops	\$ 600,000	Remote Work Platform to make system simpler to deploy at end user More secure solution for laptops into CCIC
Switches / Routers	\$ 150,000	Needs for updated networking gear related to both
Project Management Support	\$ 60,480	Project Management Support for the overall project
SecOps Contract Support	\$ 80,000	Contractor to support with Security Operations
Architecture Diagram Consultant	\$ 62,720	Architecture and DR expert to assist with design and planning of layout
Replace Legacy Firewalls @ CDPS	\$ 250,000	New firewalls will be required to implement this system.
Licenses for the VMs	\$ 140,000	VM Licenses for cloud-based solution
Backup storage arrays	\$ 36,000	Backup arrays in case of future needs.
<b>TOTAL \$ 2,029,000</b>		



# Project Schedule

	Start Date	Completion Date
<b>Planning</b>	7/1/2020	12/31/2020
<b>Implementation</b>	10/1/2020	12/31/2021
<b>Testing</b>	7/1/2021	11/30/2021
<b>Closing</b>	12/1/2021	6/30/2022



# Payback Period

## Assumptions:

- CCIC has ~23,000 users
  - During an outage, estimated 10% of users down (2,300)
  - Estimated downtime = 4 hours/Outage
  - Estimated Outages = 3/Year
  - Estimated pay = \$24/hour (\$48,000 / year)
- Annual Benefit \$772,400; Annual Cost \$552,000; Initial Cost \$2,026,590

**Payback Period: 3.07 Years**

**ROI: 10.88%**

