

# Video Remote Interpreting

## The Ninth Circuit and the Florida Experience



August 2, 2016

# Definition

Virtual Remote Interpreting (VRI) is a method of interpreting where the interpreter provides service to a court location from a remote workstation utilizing an integrated network of audio/video technology.

*Consecutive Mode* - The interpreter must wait until the parties have completed speaking before he/she communicates and translates for the parties and the court.

*Simultaneous Mode* - The interpreter is able to communicate and translate as the parties speak.



# VRI Events

- Initial appearances
- Arraignments
- VOPs
- Dependency and delinquency hearings and trials
- Traffic and misdemeanor cases
- Felony pre-trial hearings
- Docket sounding
- Injunctions
- Baker and Marchman Acts



# The Ninth Circuit Experience

2007 to Present



**NINTH**  
Judicial Circuit Court  
**OF FLORIDA**

# Ninth Judicial Circuit Coverage

3 Branch  
Courthouses  
3 courtrooms



Orange County  
Courthouse  
43 courtrooms



Juvenile Justice  
Center  
6 Courtrooms



Osceola County  
Courthouse  
12 courtrooms



Orange County  
Jail  
3 courtrooms



7 Court Facilities  
67 Courtrooms  
2,229 Square Miles  
Population of 1.62 Million

## Workload FY 2007-08

Language	Hearings	%
Spanish	22,410	91.5%
Haitian-Creole	998	4.1%
Other	751	3.1%
Sign	325	1.3%
<b>Total</b>	<b>24,484</b>	<b>100%</b>



Hearings per day requiring a court interpreter = 98  
Hearings per hour requiring a court interpreter = 12

# Staff Resources

- One managing court interpreter
- Eight Spanish court interpreters \*
- Contractual budget

Since 2004, salary restrictions and hiring freezes have resulted in an actual employment of 6.2 full-time interpreters.



# Ninth Circuit Basics

- Went “live” in October of 2007
- Designed, installed and maintained by the Ninth Circuit
  - Utilized existing digital court reporting infrastructure
- Ten remote interpreter workstations
  - Orange County Courthouse – 8 workstations
    - One (1) designated for contractual interpreters
  - Osceola County Courthouse – 2 workstations
- Twenty-four courtrooms
  - Osceola County Courthouse – 12 courtrooms
  - Juvenile Justice Center – 6 courtrooms
  - Orange County Jail – 3 courtrooms
  - Branch Courthouses – 3 courtrooms





# Challenges

1. Provide certified interpreter services for over 24,000 court hearings per year with eight staff interpreters, a hiring freeze, a declining contractual services budget, and an increase in demand for services.
2. Provide certified interpreter services each day for sixty-seven courtrooms located in seven court facilities spread out among two counties covering 2,229 square miles.



# Technical Solutions

One-way video with audio over telephone line

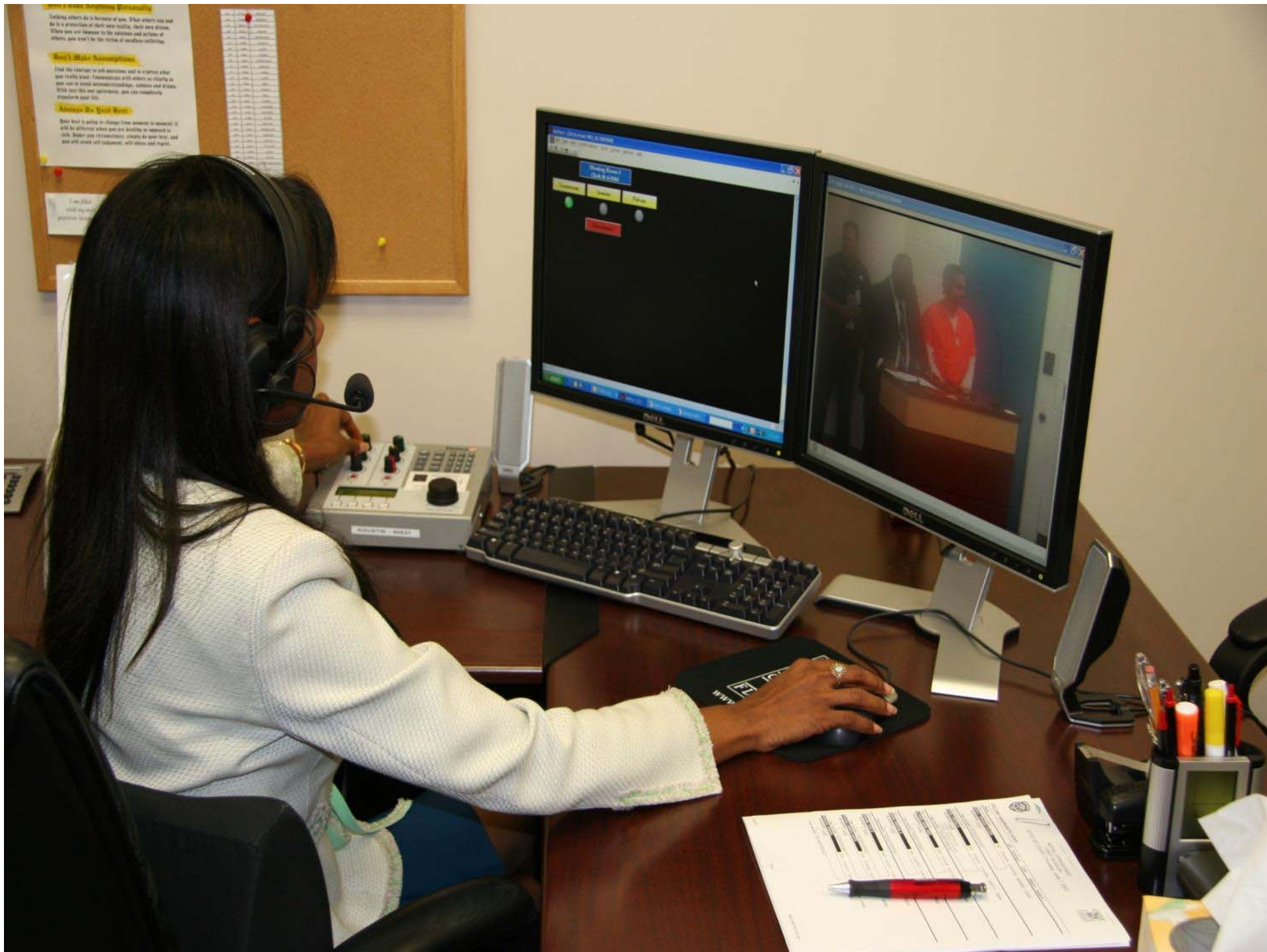


Two-way video conferencing system integrated into the court audio system



Two-way video with audio controlled through the video codec and an IP telephone network







ESM 4.0 Camera System - Videoserver1 - Windows Internet Explorer

http://videoserver1/matrix.aspx

File Edit View Favorites Tools Help

ESM 4.0 Camera System - Videoserver1

10:05 AM RSS Not Active September 14

MAPS MATRIX ARCHIVE ALARM

Cycle 2x2

Global Camera Directory

- Ninth Circuit Court
  - Orange Downtown Courthouse
    - 4th Floor Courtrooms
    - 6th Floor Courtrooms
    - 7th Floor Courtrooms
    - 9th Floor Courtrooms
    - 10th Floor Courtrooms
      - 10A - courtroom
      - 10B - courtroom
      - 10C - courtroom
      - 10D - courtroom
    - 12th Floor Courtrooms
    - 16th Floor Courtrooms
    - 18th Floor Courtrooms
    - 19th Floor Courtrooms
    - 23rd Floor Courtrooms
  - Orange Juvenile Courthouse

Custom Layout

Custom Layouts (No Layouts Defined)

10A - courtroom

10B - courtroom

10C - courtroom

10D - courtroom

Local in Double click to change security settings



**Osceola County  
Courtroom 5F**

**Courtroom**



**Defendant**



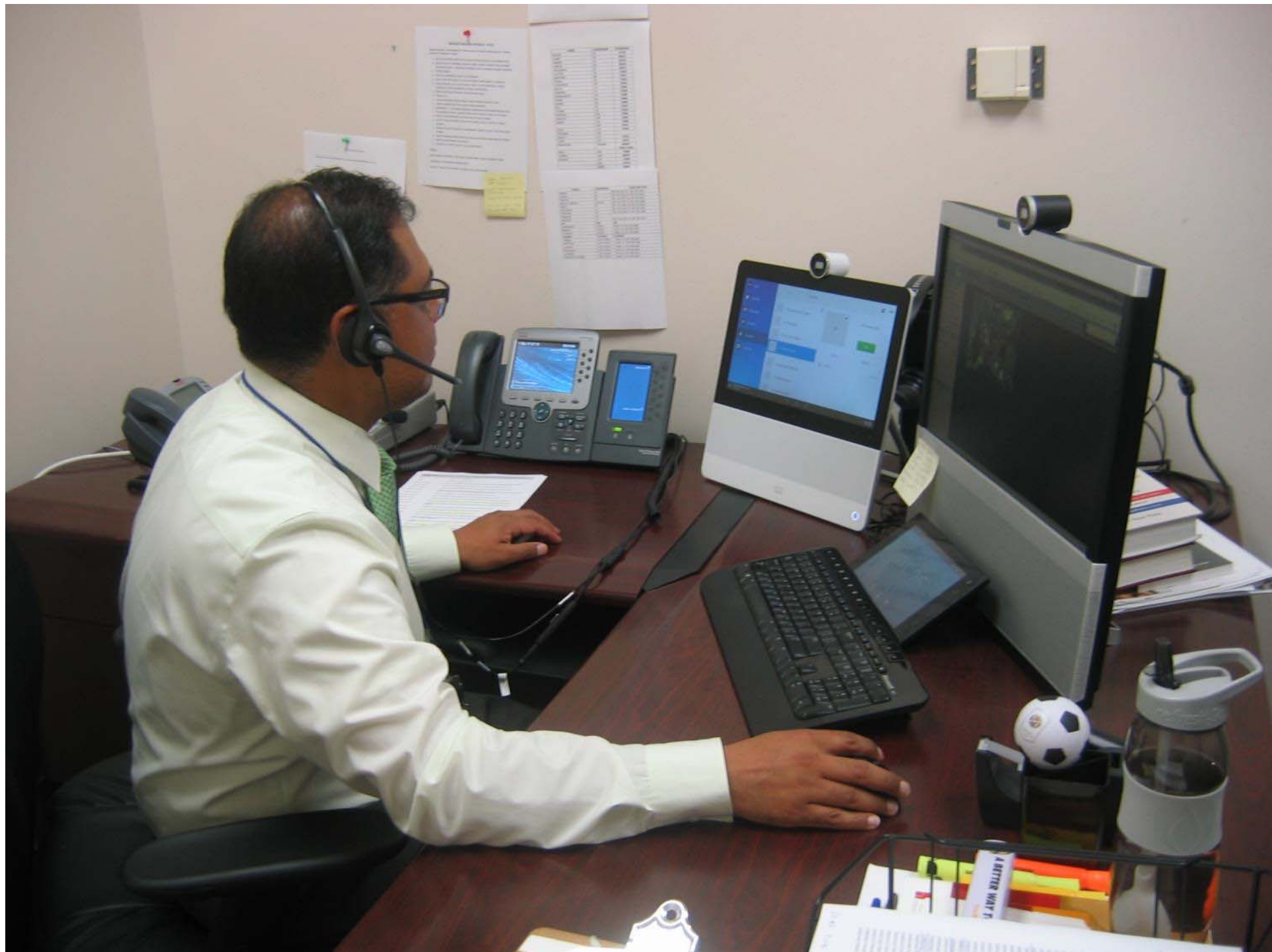
**Private**



**Disconnect**











# VRI

## Benefits

### *Costs*

- Reduces the need for contractual interpreters
- Reduces travel for staff interpreters
- More cost effective use of contractual interpreters
- Resources match demand = Cost avoidance

### *Efficiencies*

- Interpreters can cover more hearings
- Reduces courtroom wait times for interpreters
- Improves courtroom flow
- Provides qualified interpreters to courts in remote and rural locations \*\*\*\*\*



# VRI Benefits

## *Work Environment*

- Interpreter workstation is private, quiet, & safe
- Interpreters can work from home

## *Quality*

- Better audio quality
- More direct interpretation
- Judge is the focus of the LEP



# One-Way Video With Audio Over Telephone Line

## ***Audio***

- Audio over telephone line utilizing a mixer interface card
- Broadcast audio codecs connected to a networked mixer to produce FM quality audio

## ***Video***

- Security camera



# One-Way Video With Audio Over Telephone Line

## ***Pros***

- Inexpensive – Mixer interface card
- Audio controlled through software and/or touch tone phone
- Reliable backup to more advanced systems

## ***Cons***

- Low quality audio
- Bi-directional communication functionality is inconsistent



# Two-Way Video With Integrated Audio

## ***Audio and Video***

- IP based video conference system is integrated into the courtroom mixer producing digital quality audio over the network.
- Mixer control software is used to control the audio.



# Two-Way Video With Integrated Audio

## ***Pros***

- Excellent digital audio and video quality
- Simple software audio control
- Reliable and simple video control
- Does not require a call manager

## ***Cons***

- Complicated audio setup and support
- Not scalable
- Requires network mixer with remote audio control
- No ad hoc scheduling logic (i.e., No call manager)



# Two-Way Video with Audio Through Video Codec and IP Telephone Network

## ***Audio***

- The courtroom audio is switched via the video codec and through the IP telephone system.

## ***Video***

- IP based video conference system





# Two-Way Video with Audio Through Video Codec and IP Telephone Network

## ***Pros***

- Excellent digital audio and video quality
- Scalable – Mixer agnostic
- On-demand scheduling logic (i.e., call manager)
- Reliable – Easy to support

## ***Cons***

- Complicated administrative interface
- Expensive without economy of scale



# “Very” Remote Interpreting

Provide interpreting services from anywhere

## Requirements

- Laptop
- Headset and microphone
- Internet connection – 10mb+
- Web camera
- Acano Video client
- Cell phone or land line









# Sign Language

Remote sign language interpreter service provided by a contractual vendor through IP-based video conference system

- On-demand scheduling
- Portable
- Multiple languages
- Matches resources with demand
- Charges applied per minute – No two-hour minimum
- Contractual expenditure is substantially lower







# The Florida Experience

2014 to Present

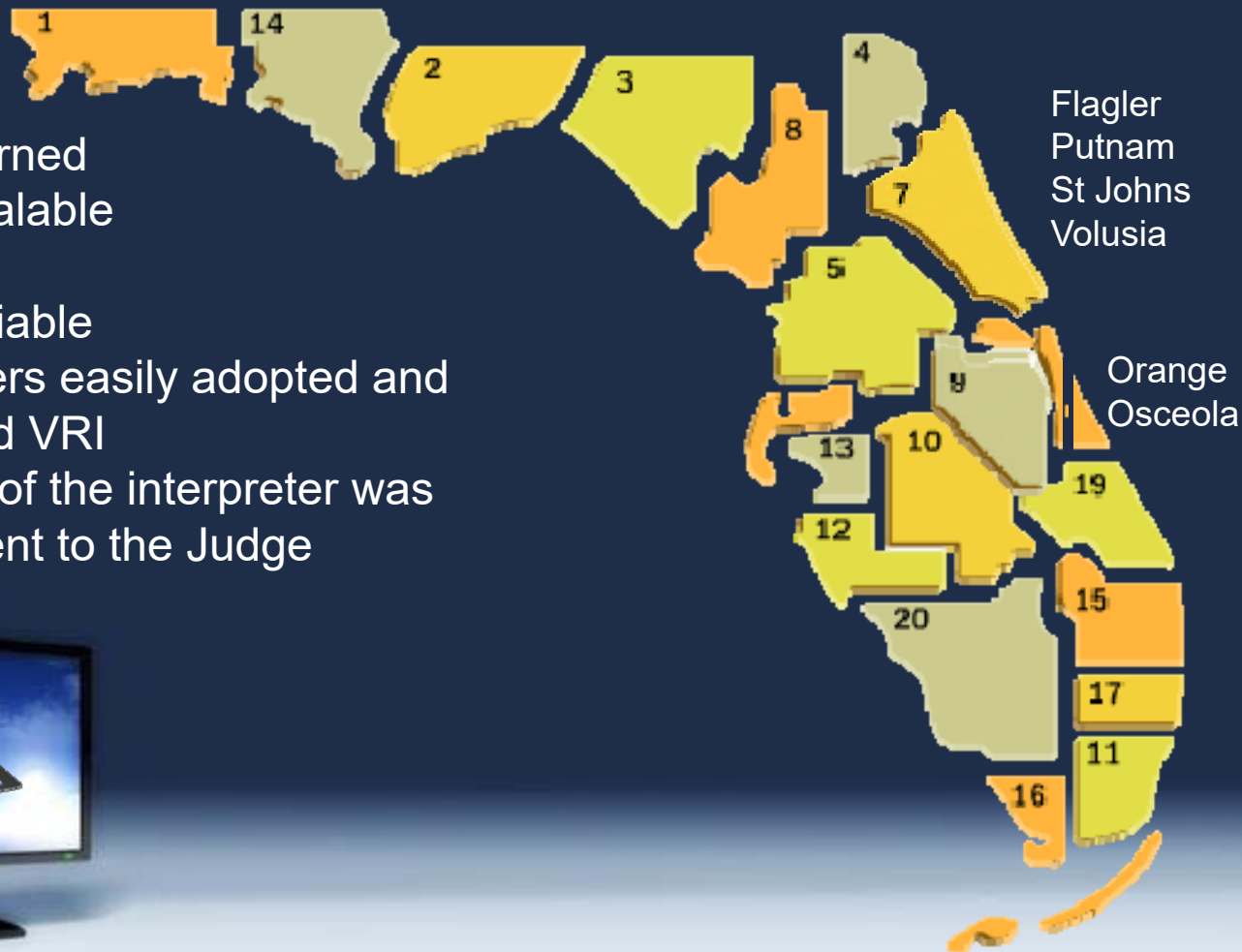


# Proof of Concept 2012

## Seventh Circuit & Ninth Circuit

### What we learned

- It was scalable
- It worked
- It was reliable
- Interpreters easily adopted and embraced VRI
- Location of the interpreter was transparent to the Judge





# Florida VRI Regional Model Workgroups

***Due Process Technology Workgroup*** - Established to review the current state of remote technology in consideration of expanding remote interpreting regionally and/or statewide.

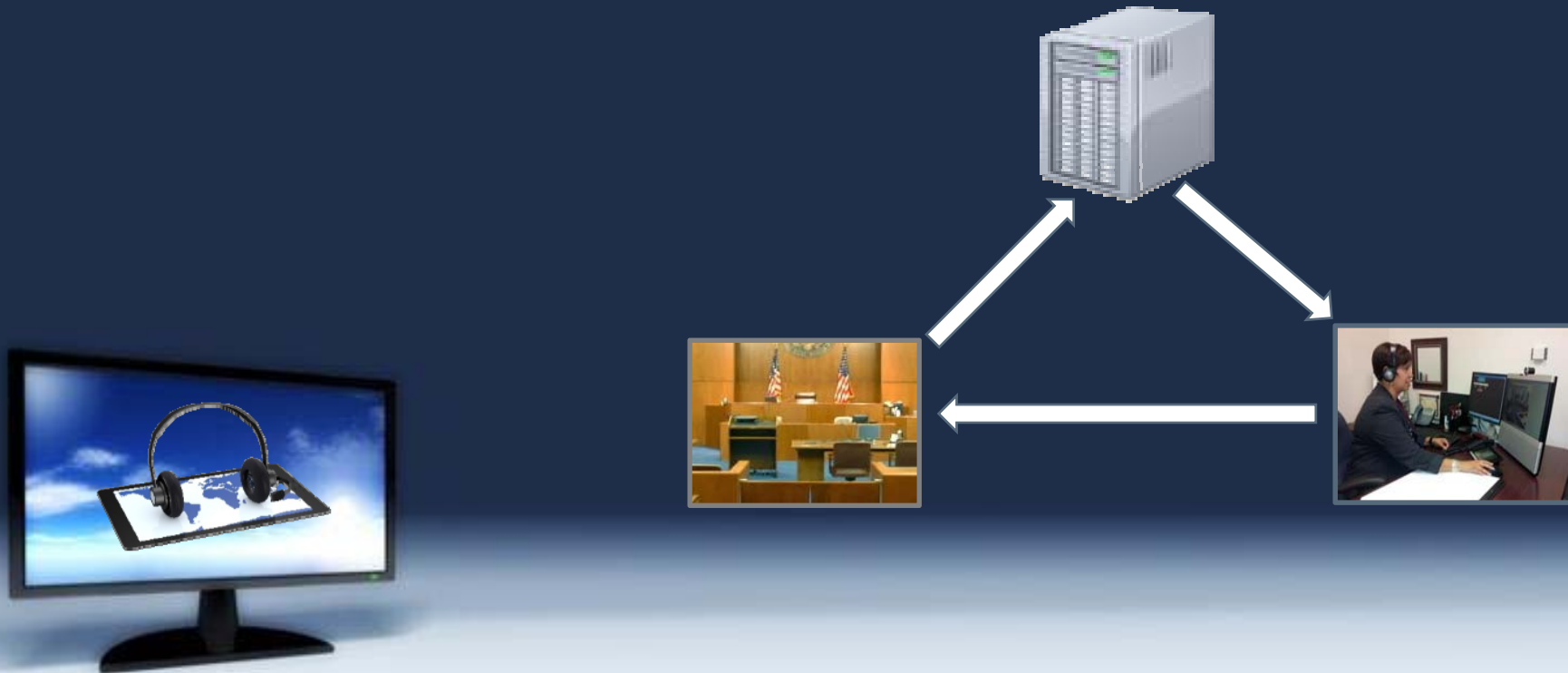
***Joint Workgroup on Shared Interpreting*** – A workgroup with membership from the DPTW, the Court Interpreter Certification Board, and the Commission on Trial Court Performance and Accountability established to make recommendations on the business processes for the “Regional Model” of sharing remote interpreting resources



# Florida VRI Regional Model

## *Due Process Technology Workgroup*

**Recommendation** - Two-Way Video with Audio  
Through Video Codec and IP Telephone Network



# **Florida VRI Regional Model**

## ***Joint Workgroup on Shared Interpreting***

### **Final Report**

#### **Recommendations**

1. Establish a statewide pool of qualified interpreters
2. Establish statewide education and training provisions
3. Data collection and performance monitoring
4. Administration of the interpreter oath
5. Establish Governance Committee
6. Governance Committee to monitor the funding and resource allocation of the Shared Remote Interpreting Model



Approved by the Trial Court Budget Commission  
June 2016

# Florida VRI Regional Model

Circuit	Courtroom(s)	Workstation(s)
Third	3	----
Fifth	3	1
Seventh	2	2
Ninth	2	2
Fourteenth	1	----
Fifteenth	3	2
Sixteenth	1	-----
<b>Total = 7 Circuits</b>	<b>15</b>	<b>7</b>



Note: 13<sup>th</sup> and 19<sup>th</sup> Circuits in the process of adding courtrooms and workstations



# Regional Model Workload

March 2014 – June 2016

Events Covered = 815

## Language

- Spanish = 792
- Creole = 14
- Other = 9

## Interpreter

- Staff = 801
- Contractual = 14

## Case Type

- County = 659
- Circuit = 121
- Delinquency = 35

## Event Type

- Arraignment = 477
- First Appearance = 152
- Plea = 117
- Pre-Trial = 31
- Sounding/Trial Call = 11
- Hearing = 9
- Detention Review = 7
- Sentence/Disposition = 5
- Trial = 3
- Witness Testimony = 3



# Scheduling On-Demand

- On-demand service
- No cancellations
- Works with the Court's inherent scheduling challenges
- Court does not have to wait for an interpreter
- Interpreter can cover many venues in multiple locations on demand
- Limited to languages provided by pool
- Sign language included in pool
- Management reports – Determine resource allocation







# Challenges

- VRI utilization
  - What VRI can do?
  - What should VRI do?
- Installation
- Support
- Network bandwidth
- Redundancy
- Training
  - Interpreter
  - Technology Staff
- Consumer/user ratio



# Equipment

# Equipment Call Manager

## Cisco UC Manager

- Scheduling logic
- > 4,000 endpoints
- Third party connections
- \$50,000 - \$100,000



# Equipment Courtroom



## **Cisco SX 20**

- 1080P HD
- 2.5 – 12X Zoom
- Video Inputs/Outputs = 4/2
- Audio Inputs/Outputs = 2/2
- \$6,000 - \$8,000

# Equipment Courtroom



## Cisco SX 80

- 1080P HD
- 4 – 16X Zoom
- Video Inputs/Outputs = 5/3
- Audio Inputs/Outputs = 15/8
- Auto-Echo Cancellation Features
- \$12,000 - \$14,000

# Equipment

## Interpreter Workstation



### Cisco DX 70

- 14" Display
- 1920 x 1080 HD Resolution
- 1080P HD Camera
- Touch Screen
- \$1,600 – \$2,000

# Equipment

## Interpreter Workstation

### Cisco DX 80

- 23" Display
- 1920 x 1080 HD Resolution
- 1080P HD Camera
- Touch Screen
- \$2,500 – \$2,800



# Equipment Miscellaneous

## Courtroom

- IP Phone(s) = \$240-\$300
- Headsets(s) = \$150-\$350
- Display = \$150-\$3,000



## Interpreter Workstation

- IP Phone w/Module = \$800-\$900
- Headsets – Dual Microphones = \$250-\$300



# Equipment

## Courtroom Mixer



### Tesira – Biamp Systems

- SVC-2 card - VoIP
- \$7,000 – \$8,500



# What's Next

## ***Ninth Circuit***

- Move all VRI courtrooms to the Ninth Circuit's call manager
- Connect the Ninth Circuit call manager to the State Call Manager
- Connect all 48 courtrooms in the Orange County Courthouse to the call manager – Audio only w/one-way through security cams
- Install foot pedals to switch audio
- Proof of concept with Arizona

## ***State of Florida***

- Re-submit FY 2015/16 budget request to add 18 Circuits, 185 courtrooms and 52 interpreter workstations to the State VRI system
- Enact Joint Workgroup on Shared Interpreting's business plan
  - Establish Governance/Oversight Committee to manage the current organic growth and future budgetary/statutory growth.



# National Project

Establish a national call center/manager to provide remote interpreting capability to courts in all 50 states. An RFP was issued in May of 2015 by the National Center for State Courts (NCSC) on behalf of the Conference of State Court Administrators (COSCA).

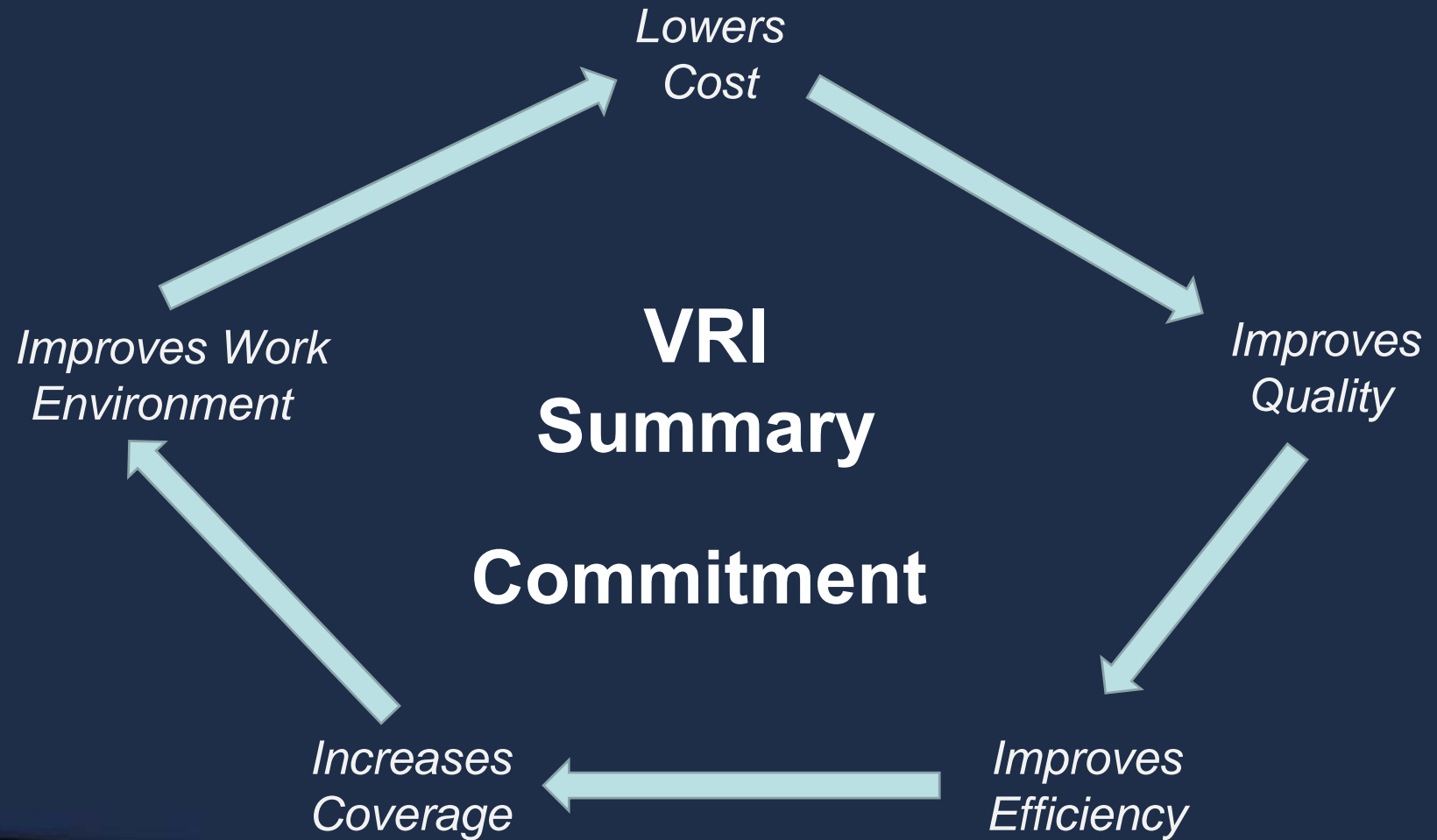
- NCSC will create and maintain an database of certified interpreters
- Vendor will support on-demand and scheduled events
- Vendor will support consecutive and simultaneous interpretation
- Vendor will provide billing services



# Recommendations

- VRI must be the first option
- To be the first option, VRI must be simultaneous mode
- Install endpoints in courtrooms that are the most expensive to cover
- Install network mixers for long term system redundancy and flexibility
- Participation will reduce contractual expenditures, increase staff interpreter coverage, and approve courtroom efficiency

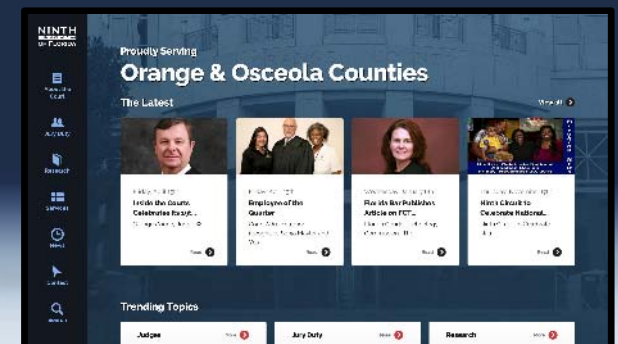






# Resources

- Ninth Judicial Circuit website
  - [www.ninthcircuit.org](http://www.ninthcircuit.org)
  - Dedicated virtual remote interpreting web page
  - Video demonstrations
  - PowerPoint presentation
- Site visits and “live” demonstrations
- Video conferences and teleconference calls



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