WebCAT Panel Discussion

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Site / Host Selection

- What is the Use case?
 - What are the requirements of that use case?
 - What view is needed to meet the requirements of the use case?
 - Is a high vantage point required?
 - Reliable power / internet available on site?
 - Would a wireless link be needed?







Agreement

- Formal Agreement / Contract
 - Protects all parties involved
 - Outlines
 - Requirements of each party
 - Basic use of camera
 - Exclusivity





Camera Options

- Different make models
 - PTZ (Pan Tilt Zoom) vs. Stationary
 - Zoom vs Resolution
 - Discreet / conspicuous
- Mounting options
 - Wall
 - Parapet
 - Flat Roof top
 - Pole
 - Other / Custom







Stationary vs. PTZ

- Use case?
- Stationary
 - Model verification
 - Erosion / Wave Run-up Monitoring
 - Pinpointing specific location
- PTZ
 - Searching (rip current, HAB, Special event observation)
 - Security
 - Entertainment
 - Media
 - Locked down PTZ Hybrid







PTZ

Pros

- Remote movement
- Reduced onsite visits for adjustments
 - Reduced maintenance cost
 - Can meet multiple use cases
 - Locked down on single preset
 - Multiple presets with different duration

Cons

- Higher upfront cost
- More difficult to install/level on all axis







Stationary

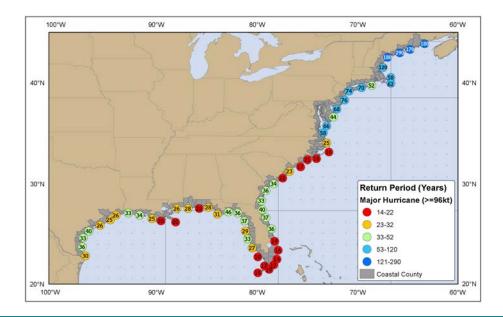
- Pros
 - Lower cost
 - Quicker installation
 - Better where measurements / calibration are needed
- Cons
 - Only has one view
 - On site visit needed for any adjustment
 - May require site survey / fine adjustment





Gaps

- More cameras in areas of higher potential for hurricane impacts
- "Pain points" in models can be soothed by cameras







Needs

Hurricane hardening

- Stand alone mounting
- Solar for power
- Wind for power
- Satellite for connectivity
- Cellular for connectivity
- All have a larger cost associated
 - Cost in equipment, install, maintenance, and service
 - More red-tape / negotiating with host for placement and larger footprint







Costs

- Large range depending on many factors
 - Funding and use case?
 - Higher resolution
 - More zoom
 - Movement / PTZ
 - Reliability of onsite services (power / ISP)
 - Likelihood of damage
 - Natural: wind, hurricane, lightning, etc...
 - Human: Vandalism
 - Audience
 - Single or few concurrent views
 - Many concurrent vies (Encoding server / CDN)







Quick Budget

- Range will depend on use case
 - Camera \$500 to \$5000
 - \$2k good reliability / quality at this time
 - Support Equipment \$100 to \$600
 - Install approx. 3 to 6hrs. technician + travel
 - Host; monetary / advertising / Prestige of benefiting public safety
 - Streaming \$300-500/month depending on use case, reliability, traffic
 - Maintenance approx. \$1500/year
 - Onsite visits
 - Cleaner (may need to be paid depending on difficulty)







Ongoing costs

Keep cameras streaming

- Personnel to monitor / repair
- Equipment replacement / upgrade
 - More likely as time progresses
- Streaming servers
- Storage of data (if needed)





