

AAPA Port Operations, Safety and Information Technology Seminar

A Partnership Approach to Creating
Regional Security Through
Integrated Technology

Presented by Jim Eldridge Port of Houston
Authority

Acknowledgements to Pat Bellamy
University of Houston and the Houston Ship
Channel - Security Council (HSC-SC)

Regional Attributes...

- **Vulnerable:** only city in the US with vulnerabilities in all FBI threat assessment matrix areas.
- **The 58-mile Houston Ship Channel:**
 - over 240 million tons of cargo;
 - over 9,000 ship calls
 - 1st in foreign tonnage – 2nd in total trade by cargo volume;
 - over 198,000 direct and indirect jobs in Texas;
 - approximately \$3.7 billion in State and Local taxes annually;
 - the largest petrochemical complex in the US:
 - 50% of the gasoline used within the US;
 - 75% of the petrochemical products and feed stocks in the US.
 - 2/3 US capacity for natural gas transmission.
 - refines 2.2 million barrels of oil each day and generates 1/8 of the nation's capacity.
- **NASA's Johnson Space Center**
- **The largest Medical Center in the world**
- **The largest Rodeo in the World**

Houston Ship Channel



April 2007

Industry Presence

- Approximately 92 MTSA-regulated Facilities
- 11 Port of Houston Authority Facilities
- Approximately 102 Facilities in East Harris County Manufacturers Association (EHCMA)

Houston Ship Channel

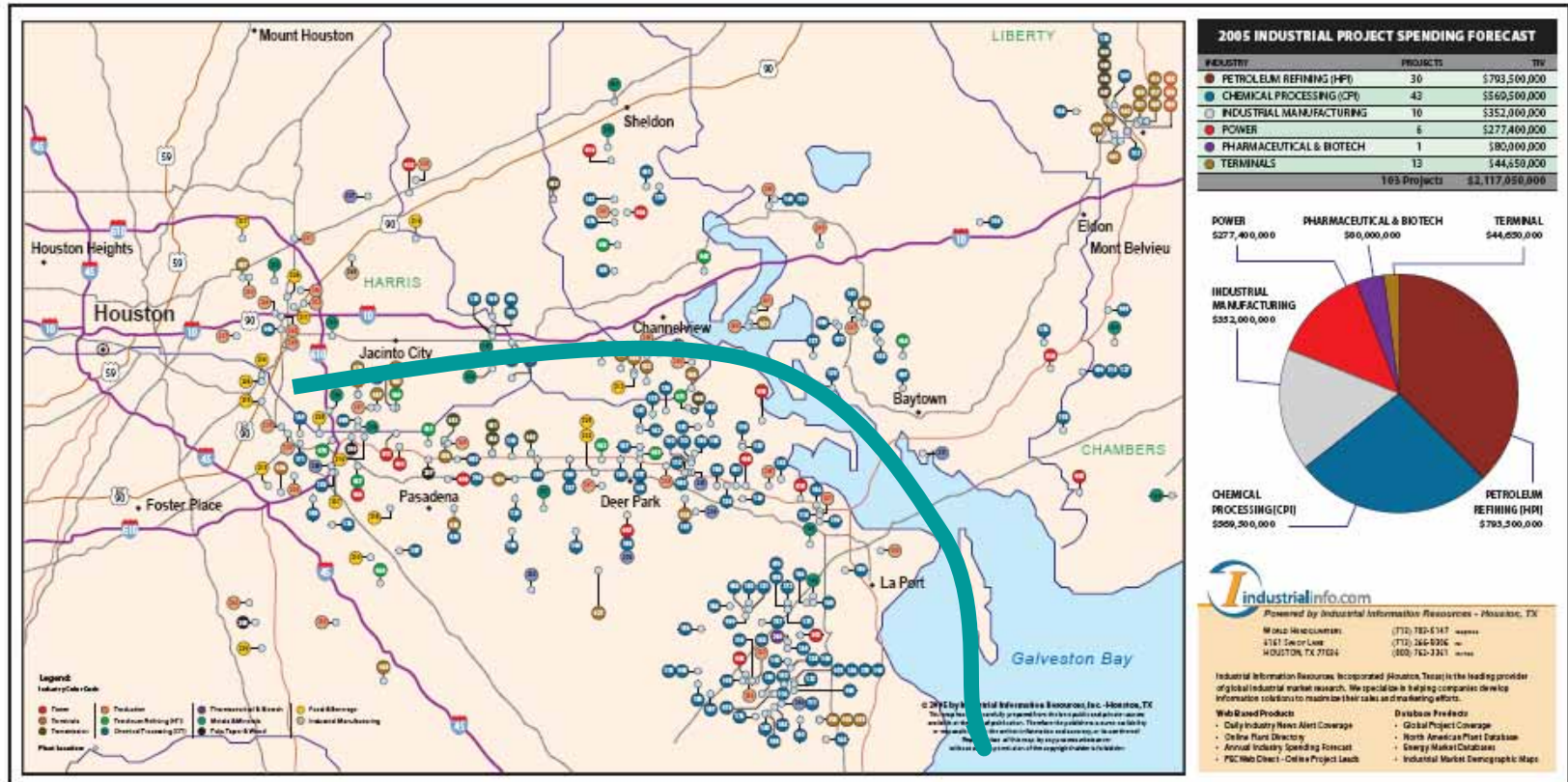
Supply Chain

“An elaborate ballet of information, people and machinery,”

Dennis Murphy, former customs director at the Port of Norfolk and former Homeland Security Department spokesman.

Houston Ship Channel Source IndustrialInfo.Com

2005 HOUSTON SHIP CHANNEL & VICINITY INDUSTRIAL PLANT DEMOGRAPHICS



Houston Ship Channel:

- The entire supply chain (the manufacturer, the buyer, the seller and the shipper) are impacted...
- The key is to ensure that the “supply chain” remains intact and to protect long term economic viability and

PROFITABILITY

Port Strategic Security Council (PSSC)

A Little Background:

- Visit by DHS prompted by US Rep. Gene Green
- Discussion at the Area Maritime Security Committee
- Decision to split the effort from the AMSC
- Formation of the PSSC (Now the HSC-SC)
- Industry Lead approach to Harris County
- Incremental agreement to apply for Port Security Grants

HSC-SC and Port of Houston Authority: Our Parts

- **“Develop the Infrastructure to Support Continued Economic Viability and Security”**
- **“Represent and Integrate Public and Private Interests Relative to These”**
- **“Draw a “line in the sand” to create Public-Private Partnerships and resolve issues in the right ways...”**

Judge Eckels—Congressman Gene Green—Wade Battles—Rick Deel
Alistair Macnab—Pat Bellamy

The Houston Ship Channel Area

Objective: Provide robust, scalable, security systems, waterside and landside, within a region commonly identified with the Captain of the Coast Guard's Sector...

**Detect, Deter and
if necessary quickly Recover**

To Address These -- The Vision:

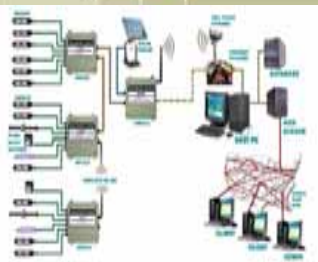
“Off-the-Shelf” Situational/Asset Awareness

The Pieces:

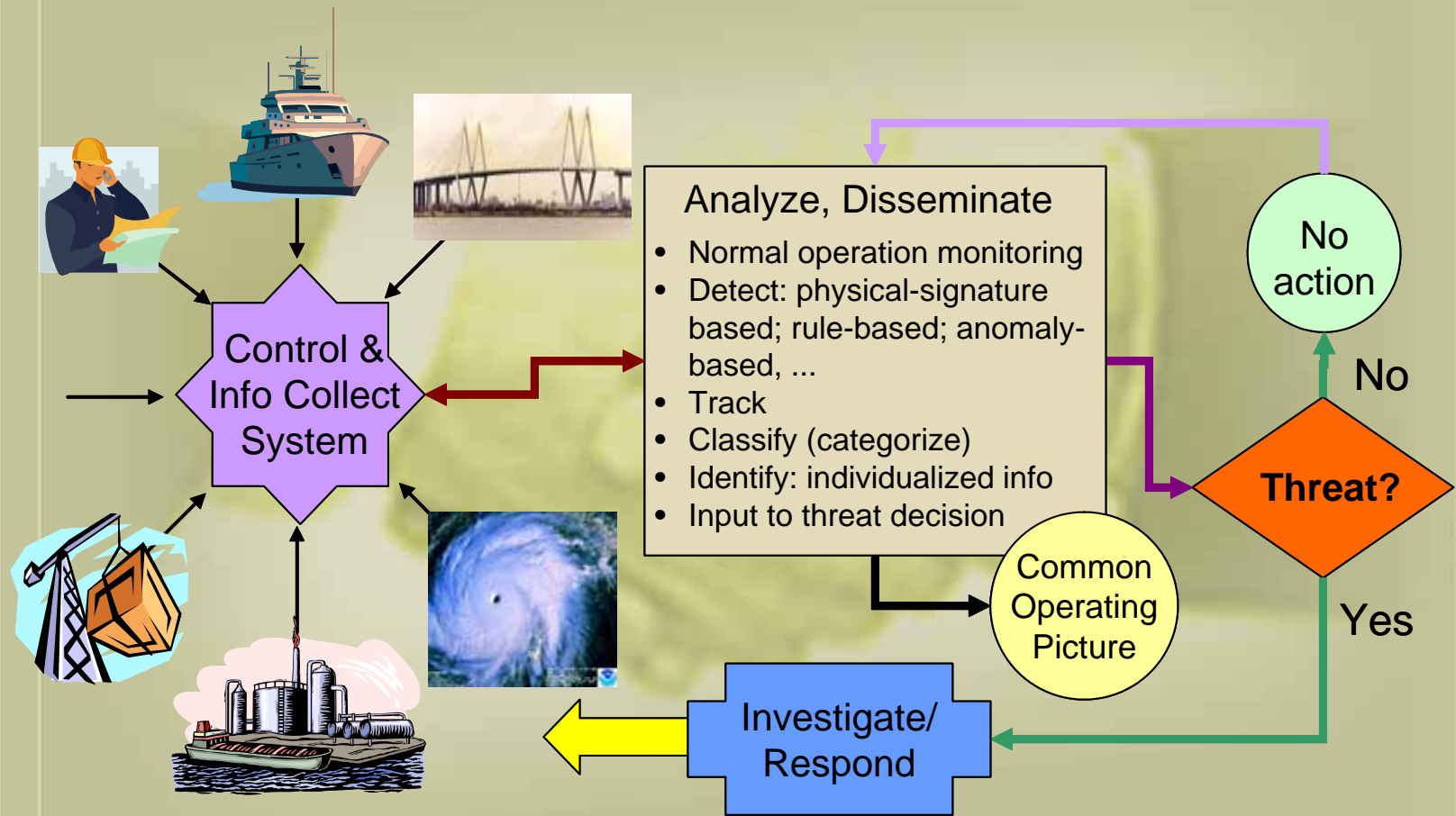
- (1) Sensor-oriented Network (Cameras, Radar, NBC, etc.)
- (2) Wireless/Wireline/Mesh Networking capabilities
- (3) Computing/process capabilities

The Intent:

Incident Command and Predictive Emergency Evacuation Environments



CONOPS Concept



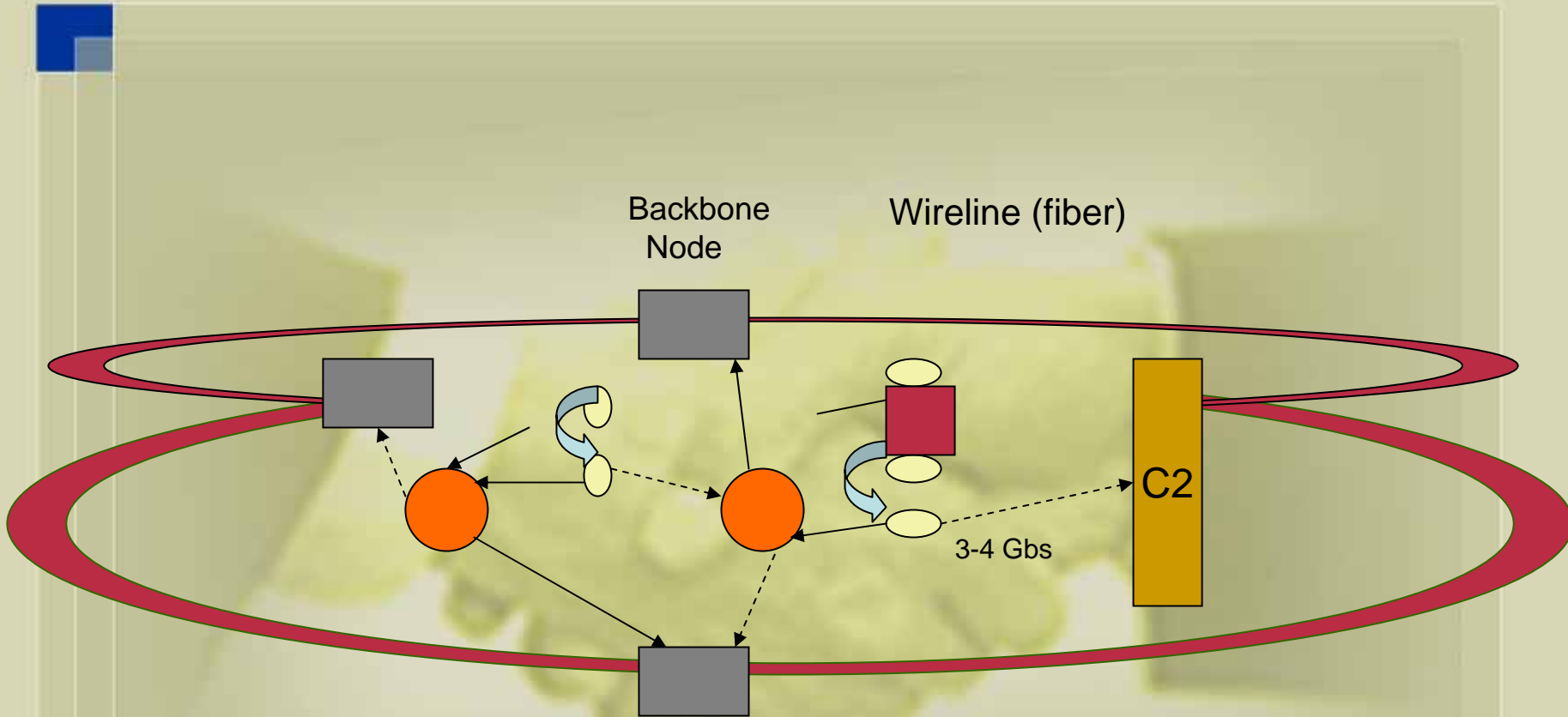
Regional Assets

- Inherent Culture that is SAFETY-Oriented
- Partnership Culture: ie “We can do this...”
- Government-owned Fiber Optic and Radio-based Infrastructure

System Deliverables:

Command, Control, Communications, Computing,
Information, Surveillance and Reconnaissance

- Cameras: Landside Security
- Radar/Cameras: Waterside Security
- C2 and Visual Interpretation Capabilities
- Visibility
 - Boats
 - Patrols
- Robot for IED Mitigation

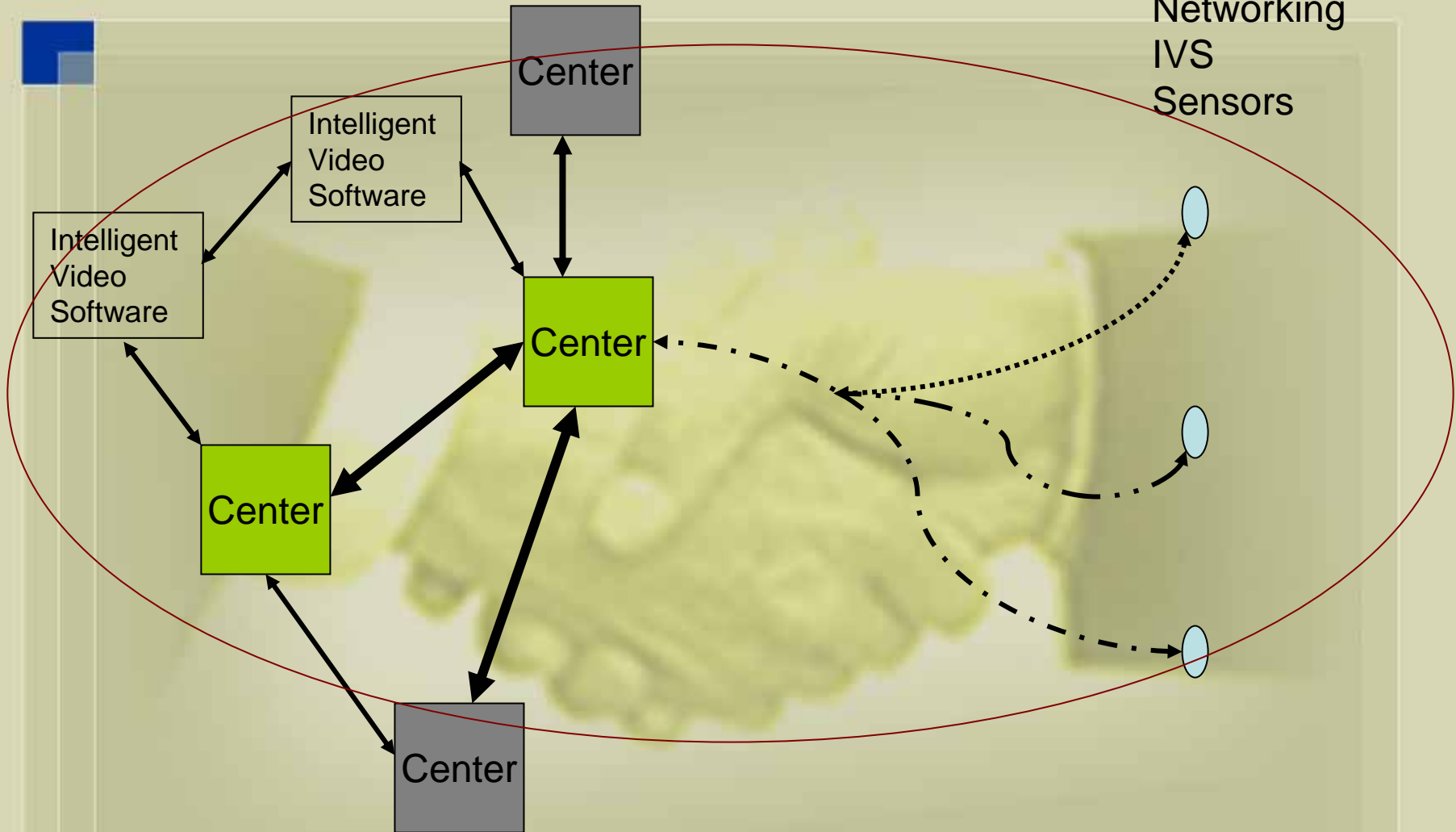


Conceptual Overview

Mesh Routing protocols Base station mode-Ad-Hoc

Potential for A Combined PHA/HSC-SC Plan/Project

Cameras
Networking
IVS
Sensors



Resolved & Working Issues

– Responsibility for Project Management, Engineering and Construction:

Harris County's Public Infrastructure Division

– Funding:

Ship Channel Security District (SCSD)

- 25 % Match
- Operations & Maintenance

– Grant Management:

Harris County and HSC-SC/SCSD

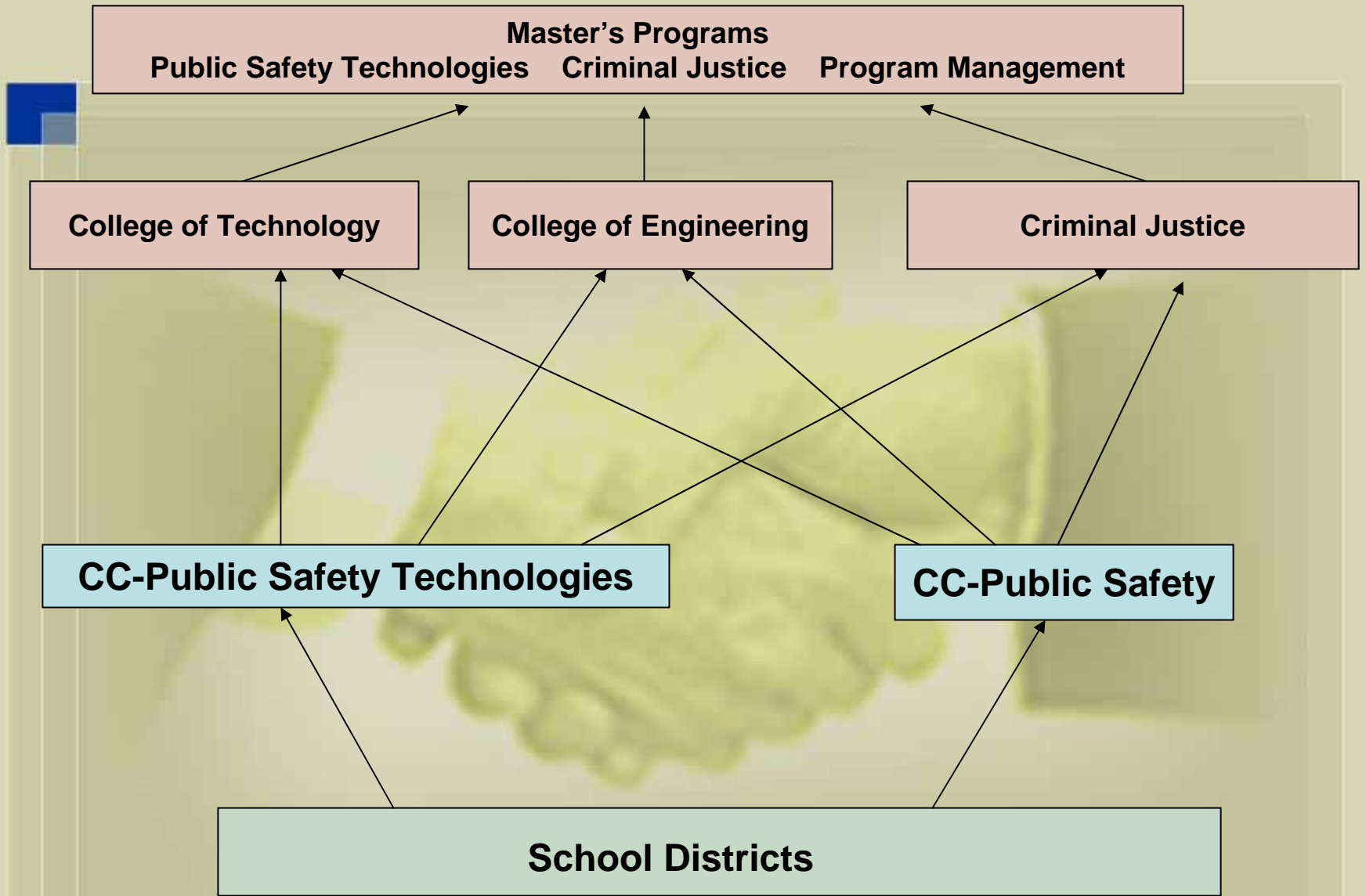
Current Status

- Preliminary Engineering Report assigned to SAIC, S&B Infrastructure and Shrader Engineering
- HB3011 introduced to enable a Ship Channel Security District
- Ongoing Consensus Building

Future

- Grant Applications to Focus on
 - Integration
 - Information Sharing
 - Public-Private
 - Interoperability
 - Voice
 - Data
 - Video Systems
- Building the Workforce to Operate and Maintain the Systems

Develop and Educate the "NEW" Workforce



Q and A?



Jim Eldridge

Port of Houston Authority

Pat Bellamy

University of Houston

HSC-SC