

Training the Workforce of Tomorrow - Today

Valley Industry Association (VIA) Meeting

February 16, 2022

Dr. Dianne Van Hook

How COC is Reshaping Education to Train the Workforce for Tomorrow?

- Why Does Training Matter?
- What Does the Future of Jobs and Workers Look Like?
- How Did the VIA and COC Partnership Start?
- How Did COC and VIA Become Connected?
- What Has Happened Since the Early 90's?
- What Has Happened Since?
- What Has Happened Recently?
- What Is In-Progress Now?
- Why Are We Doing This?
- What Are We Providing?
- Where Is This Going to Happen?
- Future Planned Programs
- How Can You Help?



Why does training matter?

With changes in the workforce community, training matters more now than ever.

- Continued improvement in the general economy is expected through 2022.
- Recovery will occur earlier in *business, scientific, and technical services* and in the information sector due to the *demand for new technologies* for the new way we are working and socializing. Construction activity has largely been restored.
- Per the EDC, “The Santa Clarita Valley labor market recovery is well underway” with all industries reporting the restoration of jobs.
- Expect the pace of the California recovery to eventually exceed the U.S. recovery...
 - Leisure and hospitality sector* to be the last to recover...due to reliance on international tourism.
 - The healthcare profession*, in particular, expects a shortage of nurses in California to linger for years.



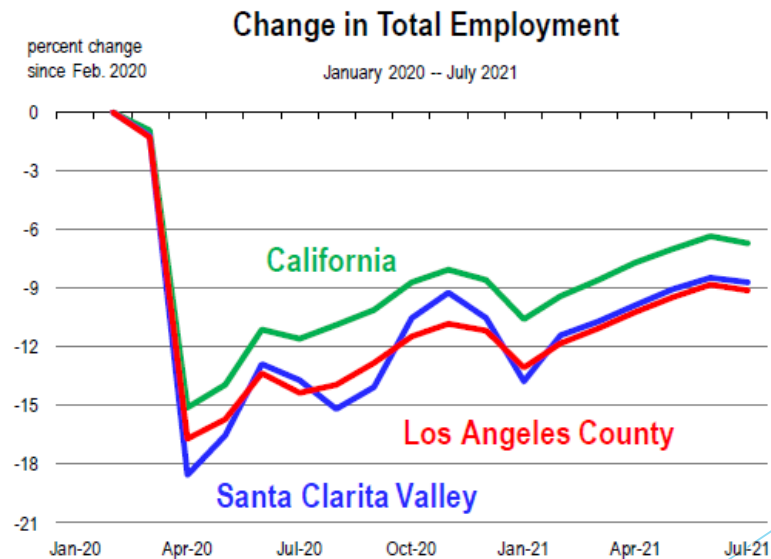
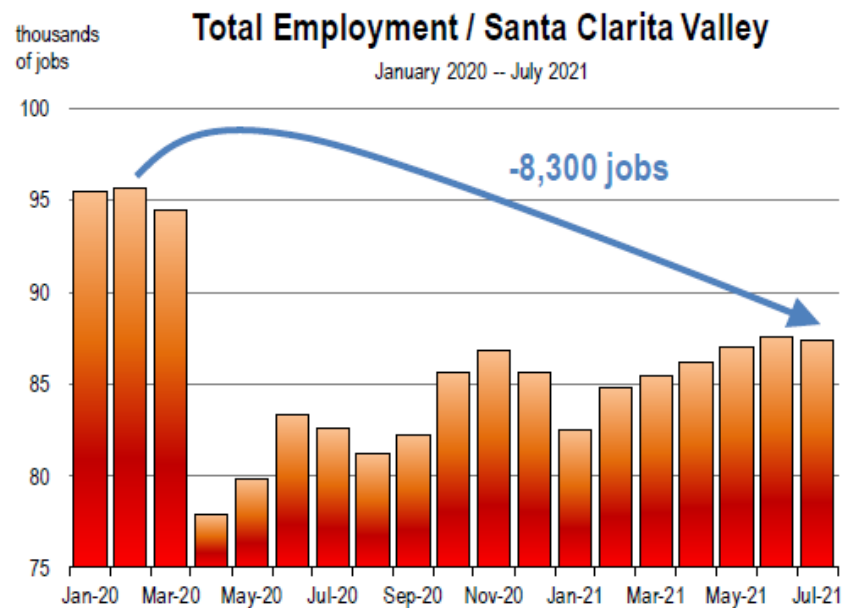
What is the 2022 Forecast of California's Employment and Workforce Needs?

Employment is the “most telling economic indicator”; “*rapid progress*” is forecasted “in the restoration of jobs in all sectors of the State and local economies *continuing through 2023*”.

Dominated by the professional, technical, healthcare, and construction sectors, momentum for job creation in California is “largely in the higher skilled professional and technical sectors which offer salaries that can accommodate purchase or rental housing. *Manufacturing employment is forecast to rebound although not yet fully recover.*”

What has happened to jobs in the SCV?

The Santa Clarita Valley labor market recovery is well underway. Jobs are being restored across virtually all industries, with some sectors approaching pre-pandemic conditions.



What are the highest demands in the industry in SCV?

- Health Care
- Telecommunications
- IT
- Social Workers
- Supply Chain Management
- Artificial Intelligence
- Digital and Social Media Marketing

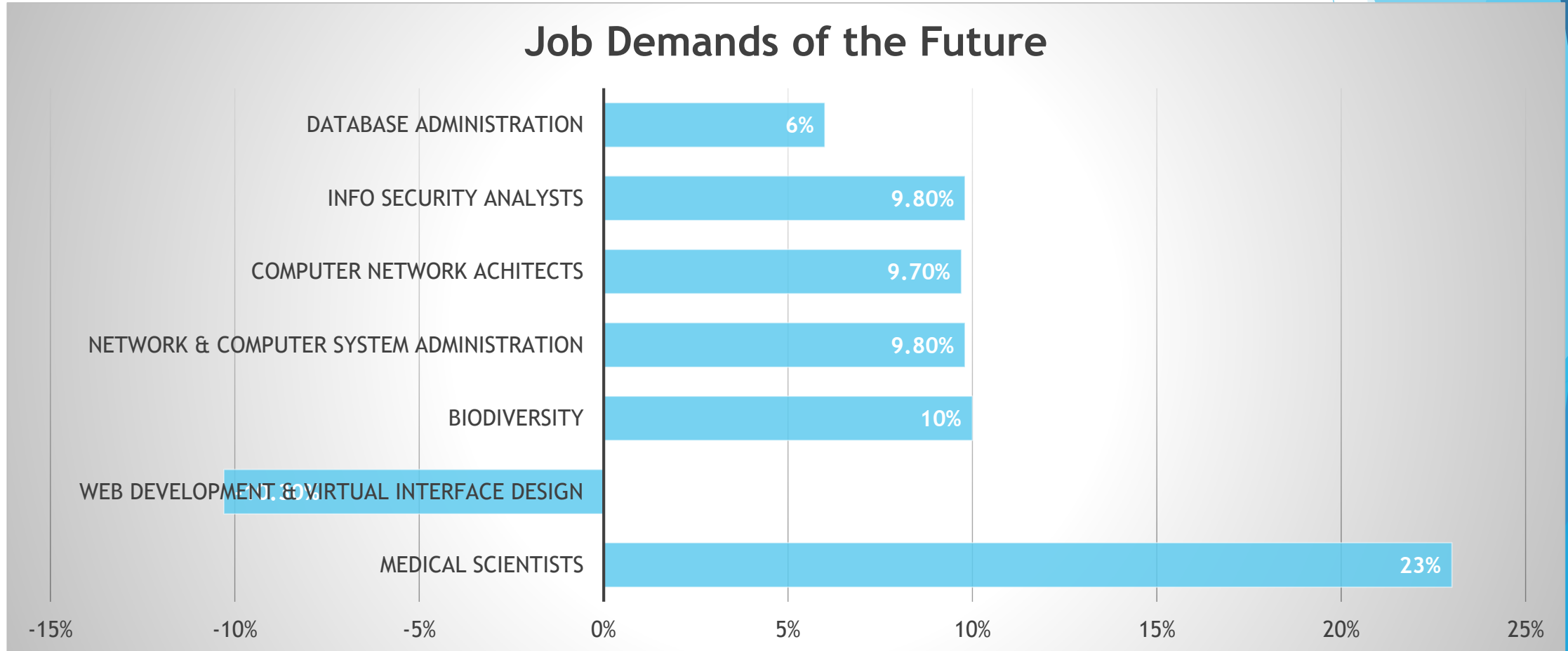


What industries are thriving in the SCV?

- Sound stages and movie production
- Construction (Residential and Commercial)
- Manufacturing
- Biomedical
- Logistics Management
- High tech industries
- Medical device creation and production
- Cyber security
- Social Media Marketing
- Landscaping



What are job demands of the future?



What do the work of future generations look like?

- Tech-savvy with Empowered Use of Technology
- Gravitate to Visual Input
- Expect Gaming-Speed Delivery
- Develop Manual Dexterity
- Accustomed to Immediate Gratification
- Expect of Graphic Application Use in Learning
- Desire Recognition of Their Creativity and Inventiveness



The Challenges:

- Supply chain disruptions and global labor shortages are now a big problem
- Shifts that have taken place in society are being more pronounced in the labor market.
- Many aging workers have retired and people are voluntarily quitting roles while demand for workers rises.
- We must train, retrain, and train again!



Our Motivation for Workforce Training delivery is all-the-more substantiated by this forecast:



Now is the time, Now is the opportunity...

Our *Call to Action* is to do our part to support and propel the restoration of Santa Clarita's economy and jobs through communicating, connecting, collaborating, cooperating, and creativity.

And, with our relationships in the community, especially with VIA, we are destined to succeed!

What about VIA and COC? How did our partnership start?

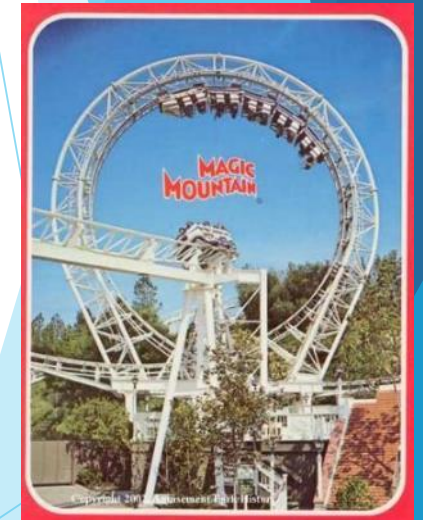


COLLEGE OF THE
Canyons
The Promise of Opportunity. Since 1969.



How did College of the Canyons and VIA become connected?

- Via Gruber Systems CEO, Louis Garasi
- Via **Connie Worden-Roberts** - VIA Education Committee Chair
- *By sponsoring the Vision 2000* lunch at Magic Mountain
- By securing an **ETP Contract**
- By sharing the **Telecommuting Center** after the Earthquake
- By launching **Fast Track Training Programs**
- By launching the **CACT - Center for Applied and Competitive Technologies** at ADI that led to the Manufacturing Education Center

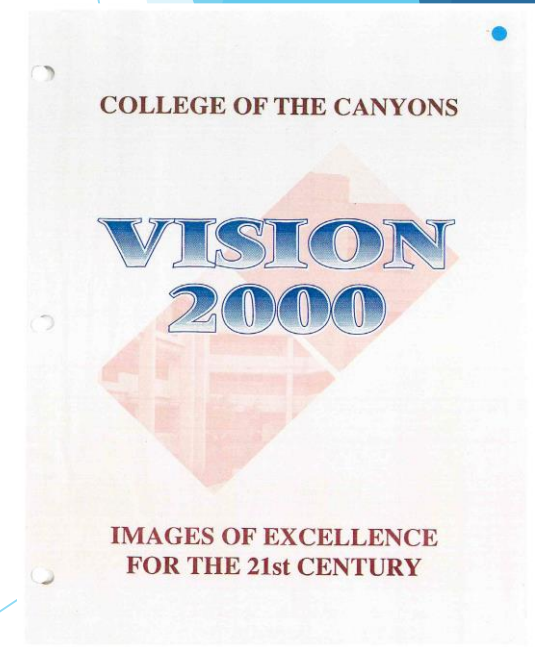


Our VIA Partnership



While we partner with hundreds of business, state entities, contractors, and projects VIA was the first to believe in us, providing guidance on our path to expand our partnerships:

- As an initiative, the Economic Development at College of the Canyons was launched in 1989 as a result of the “*Vision 2000*” event.
 - *Vision 2000*
 - A bold and ambitious plan was drafted for College of the Canyons to emerge as a leading partner in economic development and education.
 - The Economic Development Statement from *Vision 2000* stated:
“College of the Canyons is recognized for its leadership in correlating education with economic development, job retention, and job creation.”
- The College then went to be acknowledged as an equity partner in the economic development space.
- Through economic partnerships with external stakeholders, the College has expanded the promise of education and training to an ever-broader audience.



What has happened since the early 90's?

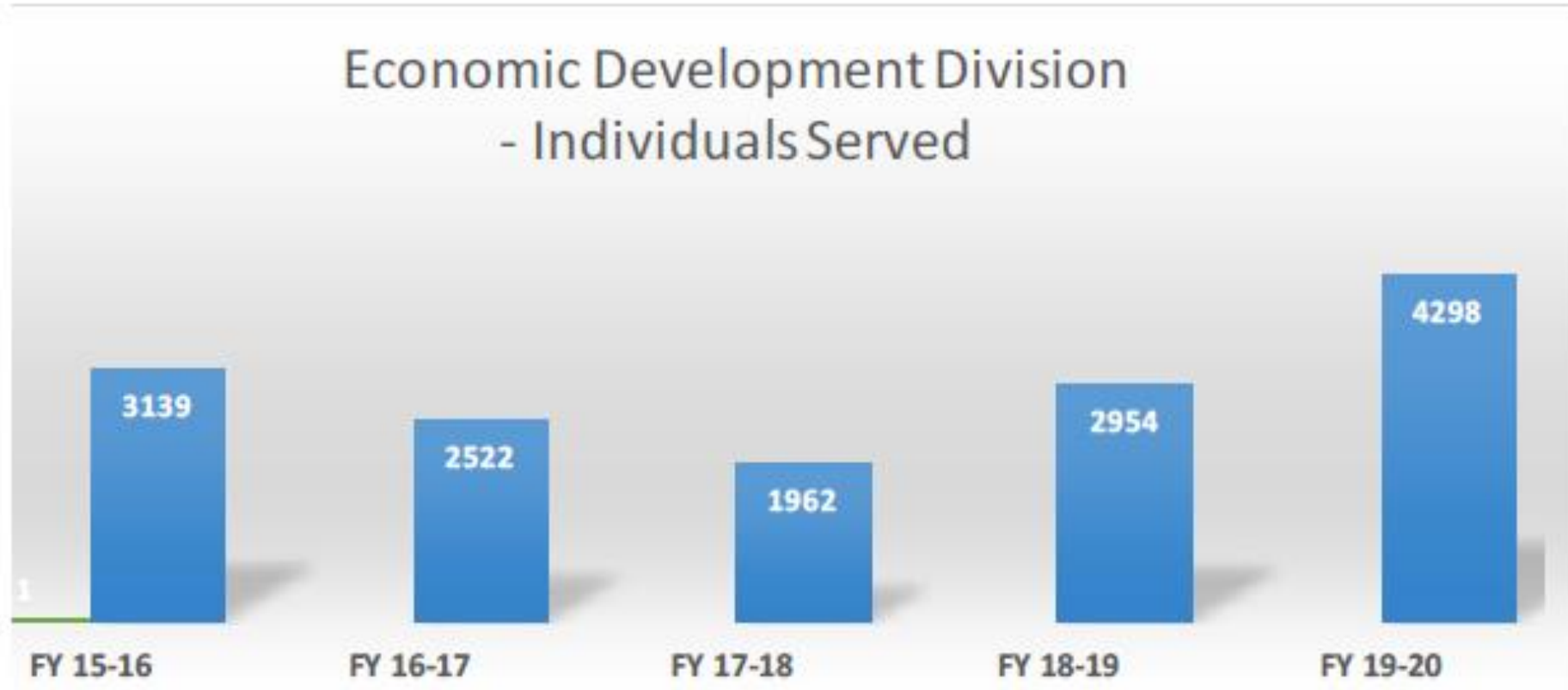
- We launched Leadership SCV.
- We advocated on topics that matter to businesses.
- We built COC's Business Alliance (from the mid-1990's to present).
- We coordinated (VIA Board and COC) Strategic Plans.
- We co-sponsored Chancellor's Circle Events.
- We worked to closer attention to the needs of employers/employees.



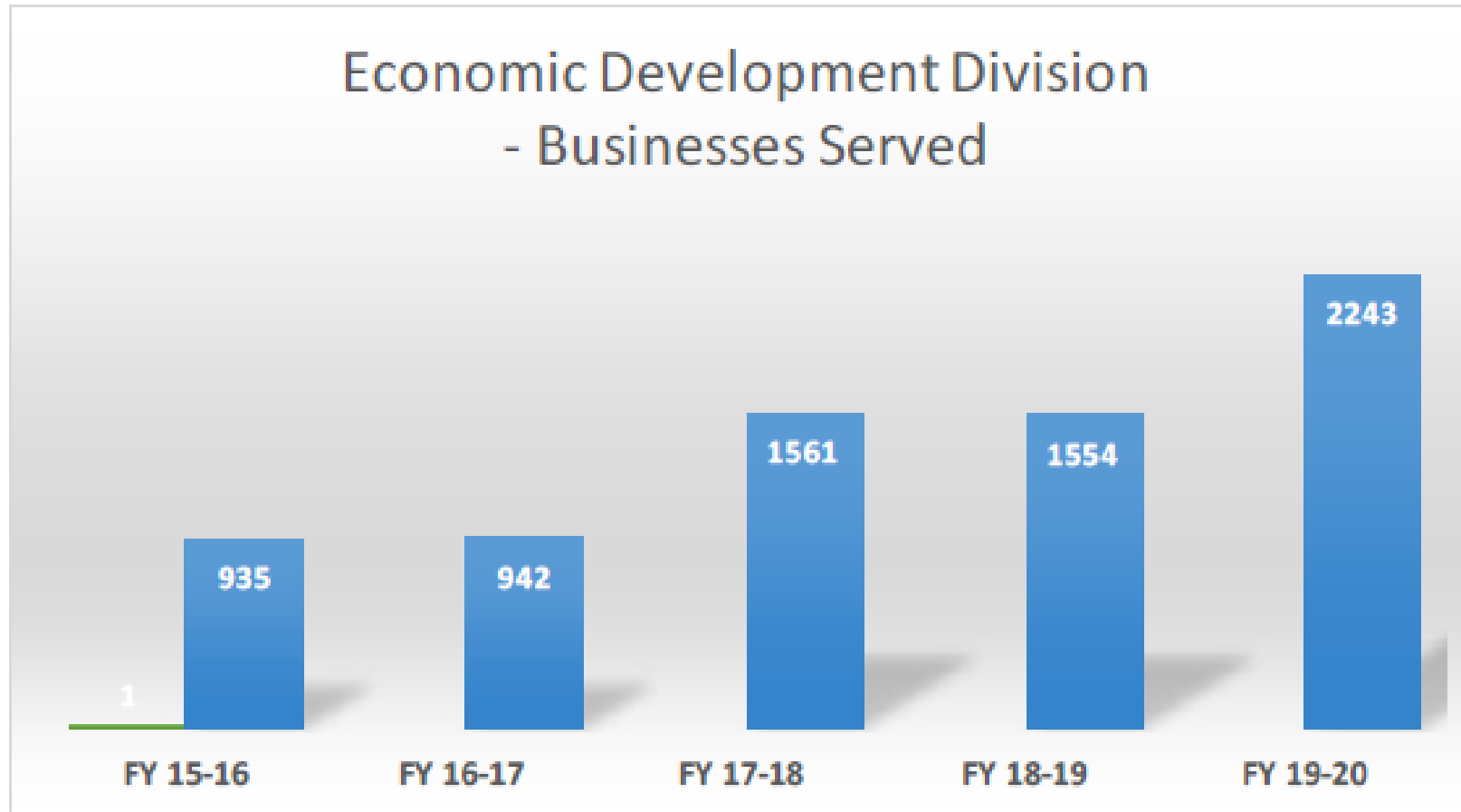
Chancellor's Circle

COLLEGE OF THE CANYONS FOUNDATION

So, what has happened since?



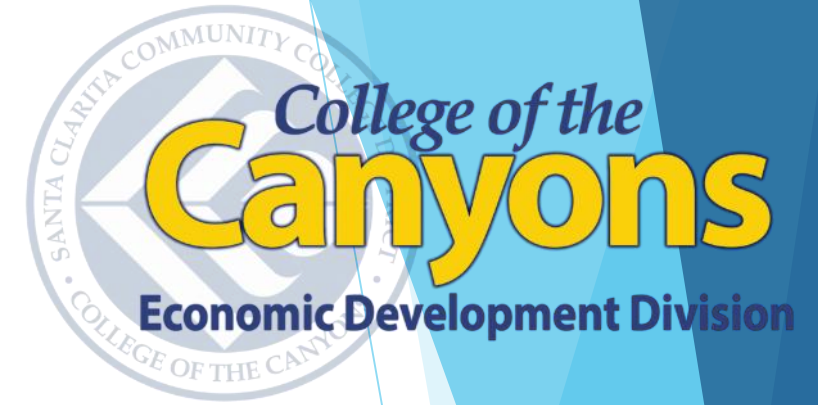
So, what has happened since?



So, what has happened recently?

In 2020-21 we:

- Trained **3,420** employees.
- Served **1,802** employers.
- Provided business consulting services to **170** companies.
- Created **130** new jobs.
- Our SBDC assisted businesses in raising **\$35.5** million in capital.
- Generated **\$34** million in revenue related to transactions of products and/or services from all units within the Economic Development Division (CACT, ETI, SBDC, Business Incubator, ETP Projects).
- Approved the hiring of over a **dozen** advisors for the SBDC to assist local companies who were negatively impacted by the pandemic.
- Supported the SBDC to work with more than **1,500** companies in providing guidance for accessing funding through the Paycheck Protection Program.
- Secured funding to expand the service contract of the SBDC by **\$200,000** in order to enable them to meet the growing demand for services due to the pandemic.



What is in progress now?

- Advocated for and obtained the appointment of an educational representative from the College to the Los Angeles Workforce Development Board in support of the County's **High Road Training Partnership**, an initiative that seeks to advance economic equity, create geographic-based career clusters, and engage employers to commit to a living wage and provide opportunities to underserved populations.
- Worked with the colleges **Employee Training Institute** to migrate instruction online to provide access to companies whose employees are not able to attend the college in person.
- Initiated the creation of a **Black Businesses Directory** to ensure equal access to funding and other resources.
- Worked with the local **America's Job Center of California (AJCC)** to recruit, train and place individuals from underserved communities in positions as HVAC Technician Trainees.
- Initiated a partnership with **Northrop Grumman** to create and launch a **Virtual Reality Training Program** to train dislocated and incumbent workers in low-observable paint technology.

HIGH ROAD
TRAINING PARTNERSHIP

America's
JobCenter
of CaliforniaSM

**NORTHROP
GRUMMAN**

Received a 1.5M contract from the Employment Training Panel

College of the Canyons' Employee Training Institute was awarded an unprecedented \$1.5 million-dollar contract with the *state's Employment Training Panel (ETP)*.

This award is the largest ETP contract obtainable and is DOUBLE the current ETP contract amount!

These training funds are just one of the many resources COC brings to Santa Clarita Businesses, and will be used to support training at through COC.

An ETI info session is planned on March 3rd, see **chat for link**



Now You See Me, Now you Don't – Low Observable Technology Offered through COC!

The Employee Training Institute's new program in partnership with Northrop Grumman and supported by COC's **Strong Workforce Program** was successfully launched with 14 participants being trained to become **LO Technicians** to be hired by Northrop Grumman Corporation.

- Stealth technology, also termed **Low Observable Technology (LO technology)** provides an aircraft the ability to go undetected by the enemy.
- The LO career pathway allows individuals to pursue higher skill levels as well as a pathway to leadership positions within Northrop Grumman
- College of the Canyons is the *only* community college in the state to offer a **Low Observable (stealth) Coatings Application Training Program**.





Certified Safety & Health Official Certificate (CHSO)



Nine (9) Required courses between 10 and 30 hours each. Choose either:

- Construction Track
- General Industry Track

Who should attend?

Those in the following roles who have a minimum of 5 years of experience overseeing safety and meet the prerequisite requirements.

- Supervisors
- Company Owners
- Top and Middle Management
- Loss Control Representatives
- Workers Compensation Administrators
- Risk Management Personnel and
- Safety Managers and Safety Engineers

Program Overview:

- Provides two clear and defined paths of study based on the participants area of interest - Construction or General Industry Safety.
- Focuses on the responsibilities of a Safety Professional and reviews extensively both federal and state occupational safety and health standards a Safety Professionals needs to be familiar with.
- Covers employee's rights, employer's responsibilities and hazard recognition with regards to occupational safety and health.

Offered through CSU Dominguez Hills OSHA Training Institute Education Center*
at the College of the Canyons' Dr. Dianne G. Van Hook University Center
Contact: 661-362-5111 or Leslie Carr at leslie.carr@canyons.edu

*The CSUDH Center is one of only three authorized OSHA Education Centers in California



New employment center

- The **New Employment Center** is a catalyst to train the workforce and meet employers' needs by:
 - Engaging students to develop *LinkedIn* and *Job Speaker* profiles
 - Working with Instruction for students to develop *ePortfolios*
 - Meeting with students for job placement in partnership with **Career Counselors**
 - Serving *Alumni* with services for job placement
 - Assisting in *resume development*
 - Adding several software options to provide students with *AI services* in terms of mock interviews and resume development
 - Offering traditional and reverse *job fairs*
 - Tracking *employer engagement* for better responsiveness
 - Leveraging technology to connect Employers and Students for *career path jobs!*



CACT Update

We relocated the CACT! CACT at B&B Manufacturing (opening January 2022):

- ▶ For over 23 years, COC operated the
**Center for Applied and
Competitive Technologies**
- ▶ The **CACT** has offered accelerated training for dislocated workers, Veterans, and those with high-functioning Autism for jobs in advanced manufacturing.
- ▶ The CACT provides **\$15,000** in training for each CNC operator - *at no cost* to employers

What are we doing?

CACT is ramping up its efforts to train the next generation of machinists:

- COC has entered a partnership with **B&B Manufacturing** to utilize its facilities for providing hands-on training for students.
- Construction for the co-located training center at B&B Manufacturing is underway, and the first cohort of students began classes **January 2022**.
- Over **70** companies in the Santa Clarita Valley count on COC to provide quality machinists for their operations each year.
- The **CACT training facility** at B&B Manufacturing will be dedicated to the Fast Track Institute programs at COC that provide those seeking entry-level employment with the skills and tools they need to be successful in the workplace!
- This agreement will enable the College to keep its promises to our training partners!



Why are we doing this?

- **Assess Readiness to Enter the Workforce; identifying opportunities, and providing placement services**
- **Identify transferable skill sets and expedited degree paths**
- **Align curriculum with Industry-Recognized Credentials and Certifications**
- **Integrate current and future technologies in classrooms and labs such as Augmented Reality/Virtual Reality/artificial intelligence systems**
- **Develop range of learning paths for focused learning and broad-spectrum degrees**



What else are we doing? Creating an Advanced Technology Center in the SCV.

The ATC is our catalyst to continue to support the development of our workforce and includes:

➤ Industry-Recognized Certifications

- MANUFACTURING SKILL STANDARDS COUNCIL (MSSC)
- NATIONAL INSTITUTE FOR METALWORKING SKILLS (NIMS)
- SMART AUTOMATION CERTIFICATION ALLIANCE (SACA)
- FANUC ROBOTICS OPERATOR
- NATIONAL CENTER FOR CONSTRUCTION EDUCATION AND RESEARCH (NCCER)
- AMAZON WEB SERVICES (AWS)



MANUFACTURING
SKILL STANDARDS
COUNCIL



Why Are We Doing This?

- Provide the Right Skills for the Right Jobs at the Right Time
- Future-Proof the Workforce by Developing a Higher-Education Model to Support Advanced Manufacturing, Information Technology, Construction, and Logistics
- Respond to the Needs of local SCV Businesses for Skilled Workers
- Utilize the Opportunities of Funded Programs to Collaborate with SCV Manufacturers and Build Industry Engagement
- Build on ETP Achievements for Job Creation and Retention
- Raise prevailing Wages in SCV
- Future evolve design of the **Entrepreneurial Center** and **acquiring equipment to support Makerspace and Innovation Incubator for hands-on learning**
- Integrate **current and future technologies** in classrooms and labs such as **Augmented Reality/Virtual Reality/artificial intelligence systems**



What will the ATC do?

In the Advanced Technology Center we will start by providing:

- ✓ **INTEGRATED ADVANCED MANUFACTURING/COMPUTERIZED MACHINING (CNC)**
- ✓ **ROBOTIC WELDING AND MATERIAL JOINING**
- ✓ **ENTREPRENEURIAL CENTER WITH MAKER SPACE AND INNOVATION INCUBATOR**
- ✓ **CONSTRUCTION TECHNOLOGY**
- ✓ **INDUSTRY 4.0 AND INTEGRATION WITH THE INTERNET OF THINGS (IoT)**
- ✓ **AUGMENTED REALITY/VIRTUAL REALITY**
- ✓ **CLOUD COMPUTING/CYBERSECURITY**



Where is this going to happen?

COC's "Interim" Advanced Technology Center will open by Fall 2022.

- The interim ATC is located off Centre Pointe Parkway and Golden Valley Road (close to Sam's Club and Walmart).
- We will occupy this short term space for 3 years as we plan a larger and permanent ATC that will grow to include *many more areas of advanced technology.*



The center will include the following spaces:

- Classrooms with simulation equipment
- Computer labs
- Precision measurement/meteorology lab
- Conference Room
- Offices for Faculty and Staff
- A large shop floor with Advanced Manufacturing equipment
- Tool crib & material prep space



Programs Planned at Interim Location

The programs that will be housed in the interim ATC are:

- **Integrated Advanced Manufacturing/Computerized Machining (CNC)**
- **Milling and Tooling**
- **Integrated Personal Fabrication (Fabrication Lab and Industry Innovation Lab)**
- **Industrial Maintenance Technician Program (fall 2023)**



Plans for Our Permanent ATC

Programs that will be housed in our permanent site include: **Advanced Manufacturing, Welding, Construction technologies** and the integration of **Network Technologies**. These include the following:

- ▶ Integrated Advanced Manufacturing / Computerized Machining
- ▶ (CNC) - digital manufacturing / computer numerical controlled machining.
- ▶ Welding / Materials Joining - high tech materials joining technicians.
- ▶ Construction Trades - Residential & Commercial - union / non-union.
- ▶ Mechatronics / Automation Center - Mechatronics, Integrated Systems Technology, Electronics, Mechanical, Hydraulics, PLC, etc.
- ▶ Industry 4.0 - Industrial Internet of Things “IIoT” Integration.
- ▶ Mission Critical Automation Technicians - HVAC/R, IT/Networking, Robotics, Sensors, CISCO, Cyber-Security, etc.
- ▶ Supply Chain / Logistics Management - Distribution, warehousing
- ▶ Quality Control, Metrology, Lean Six Sigma - coupled with majority of programs for continuous improvement tools for all industries
- ▶ 3D Digital Design / Additive Manufacturing Technologies - CAD /CAM / Rapid Prototyping, 3D Printing, etc.
- ▶ Integrated Personal Fabrication & Metal Fabrication Technology

Why do we do what we do?

Our projects allow the College to provide skills-based training in the areas of ***Information Technology, Advanced Manufacturing, Construction, and Logistics*** to equip individuals seeking middle-income careers...and we are moving quickly!

- ✓ Secured a site to establish an interim ATC
- ✓ Led an effort to find, secure, and develop a 50,000 square foot facility to house a new ATC (Advanced Technology Center) under a \$1.5 million-dollar start-up grant by the State of California.
- ✓ Identifying land and where to construct a permanent ATC - Advanced Technology Center
- ✓ Launching our Employment Center
- ✓ Relocating AJCC (America's Job Center of California) at COC!

How did we get here?

- ▶ In Fall 2019, **Assemblywoman Christy Smith** facilitated a **\$1.5M** appropriation from the state for our permanent **Advanced Technology Center**.
- ▶ In early 2020 we started working with the **Chancellor's Office** then the pandemic happened.
- ▶ Now, **U.S. Representative Mike Garcia** has facilitated a **\$1M** appropriation equipment request that is pending in congress.



California Community Colleges
Chancellor's Office



How can you help?

College of the Canyons cannot do this alone, we need your help!

- We need **VIA members** to support the vision of the ATC through *advocacy*, *business* and *personal connections*, *capital support* and *curriculum development*.
 - We need land! We are currently seeking 6 -10 acres of land for our *build-to-suit* ATC project.
 - We need input from you about your training needs.
 - We need partners to get the word out!
- COC has **\$15M** set aside for the ATC and *we are ready to invest in the future* of Santa Clarita's workforce!

TOGETHER WE WILL AMAZE SCV BUSINESSES AND NEWLY SKILLED WORKERS ALIKE!



List of SCV Employers who have hired graduates from CACT

ABACORP CNC

AERO ENGINEERING & MANUFACTURING CO.

AEROSENSE INC.

AEROSPACE DYNAMICS INTERNATIONAL INC.

AEROTEK

AIRCRAFT COMPONENT REPAIR INC.

AIRFLOW RESEARCH

ALLIANCE METAL PRODUCTS

AQUAFINE CORPORATION

B & B MANUFACTURING CO, INC.

BAYLESS ENGINEERING & MANUFACTURING

CIRCOR AEROSPACE

CLASSIC WIRE CUT

COLBRIT MANUFACTURING