

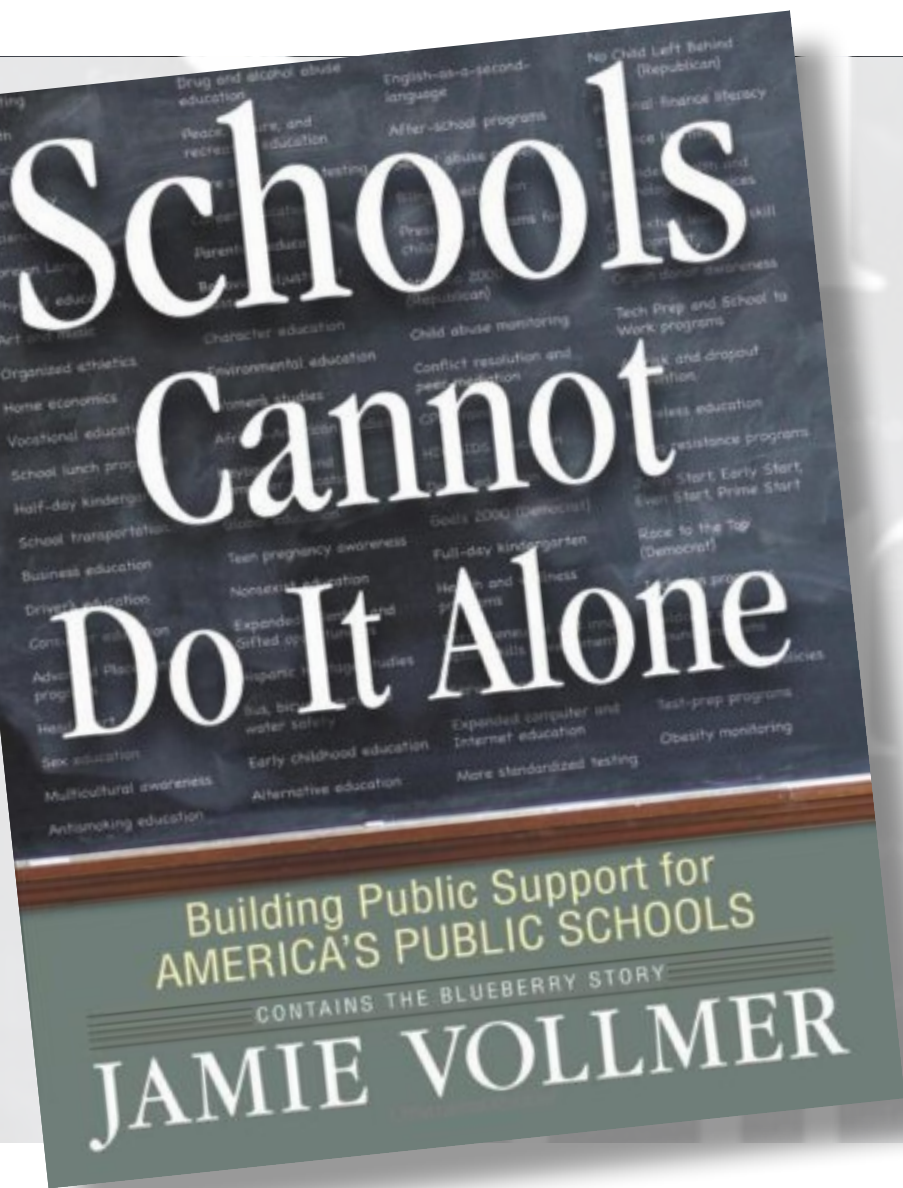
Career Center
Working Group

Meeting #2
January 29, 2018

High School
Planning
& Design

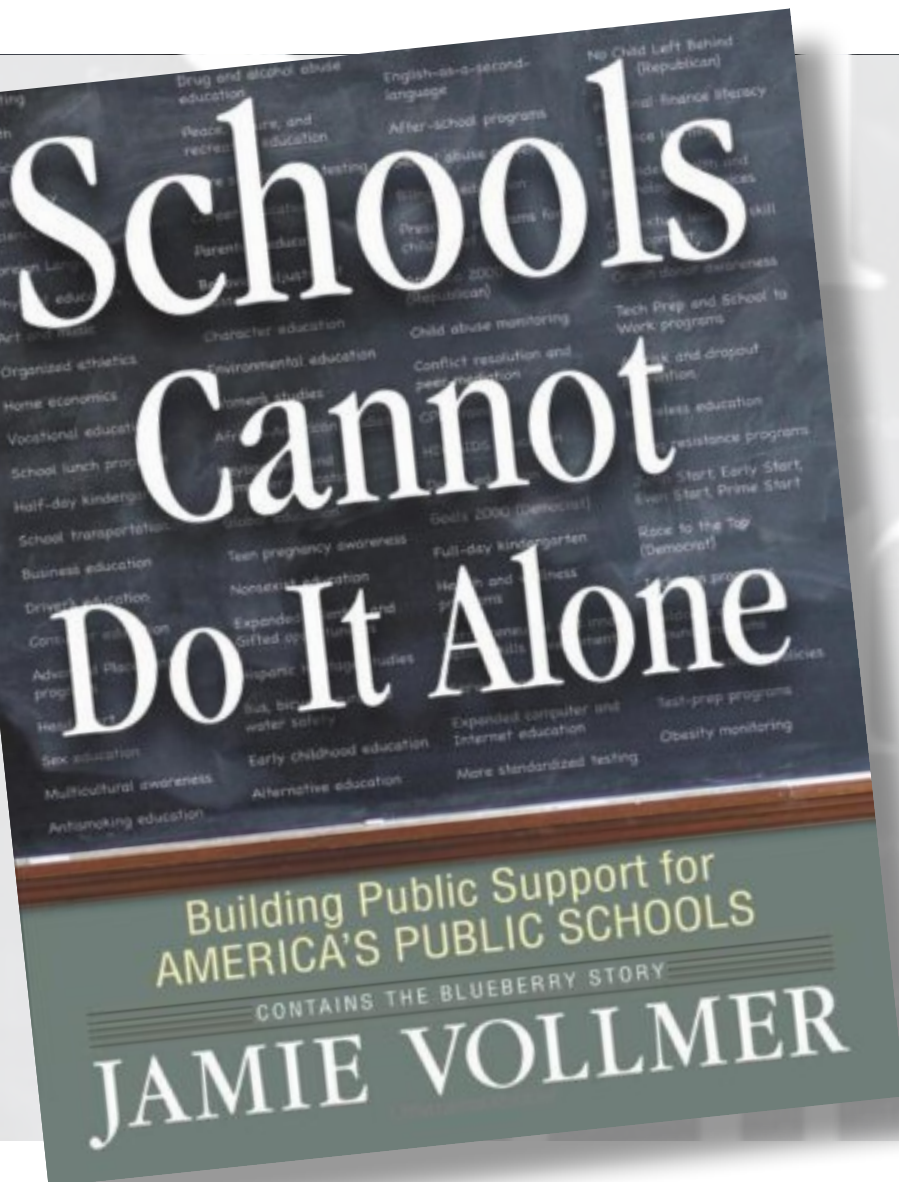


Derk Jeffrey, AIA
Bill Bradley, PhD, AIA



To get from **A** to **B**...
...it's best to go through **C**.





“Prerequisites of Progress”

- **Understanding**
- **Trust**
- **Permission**
- **Support**

Meeting Objectives / Agenda

**Career Center
Working Group**

Meeting #2
January 29, 2018

**High School
Planning
& Design**

- **Inform the Process**
How has facility design evolved to support learning?
- **Clarify the Challenge**
What does it mean to “optimize” the Career Center site?
- **Receive Guidance**
What informs the design concepts?

Meeting Objectives / Agenda

Career Center
Working Group

Meeting #2
January 29, 2018

High School
Planning
& Design

- **Inform the Process**
How has facility design evolved to support learning?
- **Clarify the Challenge**
What does it mean to “optimize” the Career Center site?
- **Receive Guidance**
What informs the design concepts?

Local

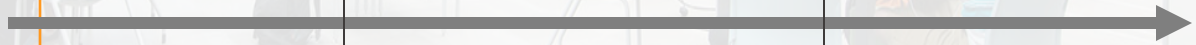
Global



Agricultural

Industrial

Post-Industrial



Local

Information
Digital
Virtual
Specific
Collaborative

What's
happening in
the world?

Teacher-led



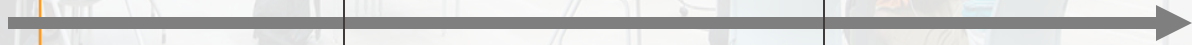
Agricultural

Student-led



Industrial

Post-Industrial



What's happening in education?



Teacher-led

Information
Digital
Virtual
Specific
Collaborative

One space



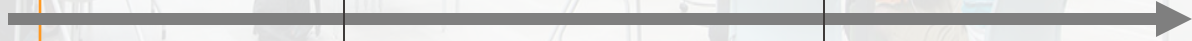
Agricultural

Many different spaces



Post-Industrial

Industrial

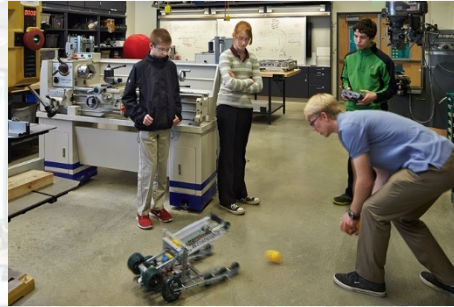


What's happening in facility design?



Many similar spaces

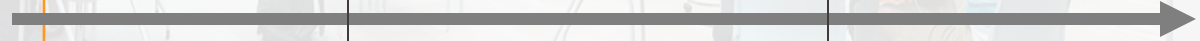
Adaptable
Flexible
Varied
Inviting
Catalytic



Economy

Education

Facilities



What's happening?

Information
Digital
Virtual
Specific
Collaborative

Adaptable
Flexible
Varied
Inviting
Catalytic



What's
happening
in Virginia?

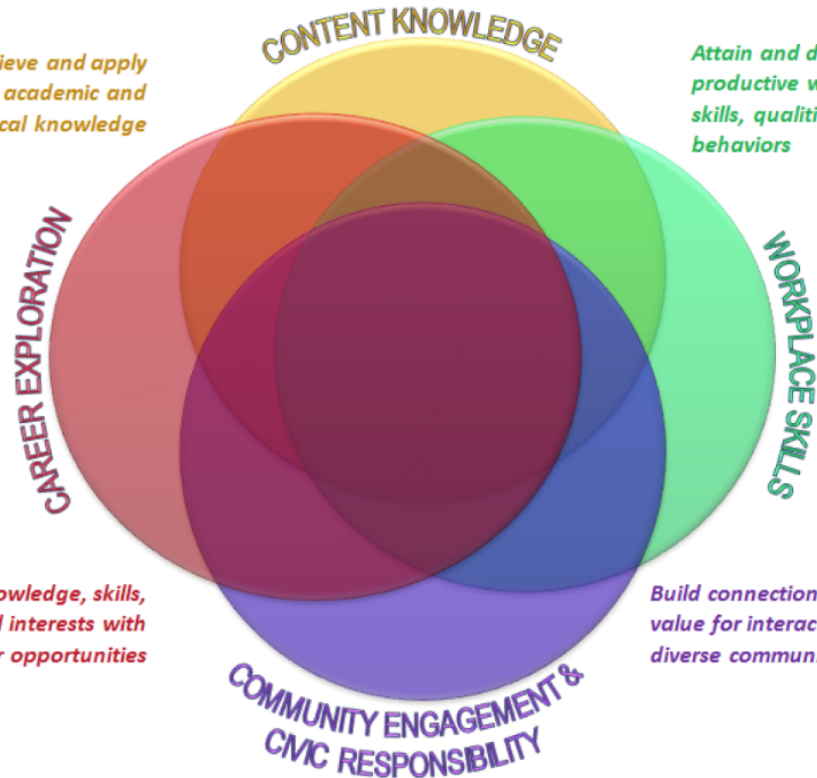
Profile of a Virginia Graduate In Virginia, the Life Ready Individual Will, During His or Her K-12 Educational Experience:

*Achieve and apply
appropriate academic and
technical knowledge*

*Attain and demonstrate
productive workplace
skills, qualities, and
behaviors*

*Align knowledge, skills,
and personal interests with
career opportunities*

*Build connections and
value for interactions with
diverse communities*



Spaces like this...

Corridor



...are now like this.

Circulation / Collaboration

diverse learning environments for a variety of learning activities and preferences

adaptable spaces and flexible, comfortable furniture

transparency and connectivity



Spaces like this...

Classroom



...are now like this.

Learning Studio



Spaces like this...

Library



...are now like this.

Knowledge Market



Spaces like this...

Cafeteria



...are now like this.

Innovation Commons



Spaces like this...

Auditorium



...are now like this...

Learning Theater



...and this.

Multi-Use Performance



...and this.

Multi-Use Performance



Spaces like this...

Courtyard



...are now like this.

Outdoor Learning / Lab



Say what you mean

Learning Space Types

Breakout



Collaboration

FUNCTION	Small group
FURNITURE	Writing surfaces, Flexible seating
FLEXIBILITY	High
TECHNOLOGY	Wifi, Power, Whiteboard, Screen
LEARNING STYLE	Collaborative, Multiage

A breakout area is an informal environment usually adjacent to and observable from core instructional areas or labs. Students can spill from the main class to collaborate in small teams. It typically features wifi and power for devices, as well as low tech writing surfaces. Break out areas can also be used by teachers to model collaborative work.

of people **3-8**

Collaborative Commons



Collaboration

FUNCTION	Medium size group
FURNITURE	Moveable tables, Toolbox, Flexible seating
FLEXIBILITY	High
TECHNOLOGY	Wifi, Power in floor
LEARNING STYLE	Project-based, Collaborative, Multiage

A learning lounge is a larger break out space where multiple groups can work on interdisciplinary or multiage projects. It is intended to be located in between learning communities as a shared resource.

of people **30-60**

Dining Commons



Gathering

FUNCTION	Dining
FURNITURE	Variety of tables and chairs
FLEXIBILITY	High
TECHNOLOGY	A/V, Screens, Wifi
LEARNING STYLE	Social

Dining should be celebrated and can be a significant learning experience about social interaction, nutrition and health, and our natural resources. This area can be adjacent to the Learning Commons to create a vibrant multipurpose hub at the heart of a learning community.

of people **150+**

Fitness



Gathering

FUNCTION	Movement, Play
FURNITURE	Sports gear, Chairs as needed
FLEXIBILITY	Moderate
TECHNOLOGY	A/V, Screens, Wifi
LEARNING STYLE	Kinesthetic, Social, Collaborative

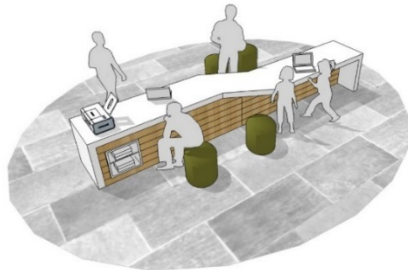
Fitness centers are more than just a place to 'let out energy,' they can be the introduction to a lifelong understanding about healthy living, the joys of team sports, and collaboration and competition.

of people **20-150**

Say what you mean

Learning Space Types

Genius Bar



collaboration

FUNCTION	Innovation / Resource
FURNITURE	Bar, Stools
FLEXIBILITY	Low
TECHNOLOGY	Connectivity, Printer
LEARNING STYLE	Support, Multitage

A genius bar is a technologically rich help station where students can "plug in", print, study, and receive support from tutors or peers. Designed to be an optimal setting for groups of 2 or 6, it can also serve for individual study, and occasionally group study. The genius bar can be located in a public, highly visible area of the building, making it an obvious resource for all students.

of people **2-6**

Learning Lab



Core Instruction

FUNCTION	Work space for: Art, Science, Culinary arts
FURNITURE	Studio / Lab furniture, Storage, Worksurface
FLEXIBILITY	Moderate
TECHNOLOGY	Wifi, Power, Water
LEARNING STYLE	Project-based

The infrastructure for a science lab, art space, or other hands-on project learning environments tend to be identical. Outfitting studios and labs in a similar fashion leads to maximum flexibility as programs change or grow.

of people **15-30**

Learning Studio



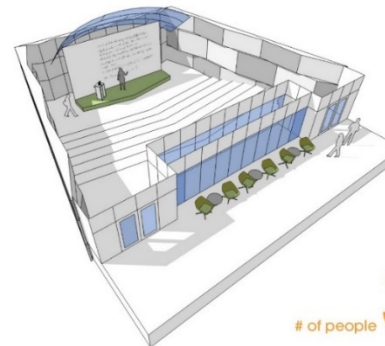
Core Instruction

FUNCTION	Core classroom
FURNITURE	Movable tables, Flexible seating
FLEXIBILITY	High
TECHNOLOGY	Wifi, Screens, A/V, Whiteboards
LEARNING STYLE	Multimodal, Multitage

An "L" shaped classroom allows for maximum flexibility among younger learners using small group centers, while still allowing older students to interact in larger group instruction & discussions.

of people **15-30**

Learning Theater



Collaboration

FUNCTION	Large group
FURNITURE	Stepped seating, Pillows, Chairs
FLEXIBILITY	Moderate
TECHNOLOGY	A/V, Screens, Wifi, Microphones
LEARNING STYLE	Presentation, Sharing

The learning theater is a casual auditorium intended for heavy use throughout the school week. More than just for assembly groups, the learning theater is an essential space for learning multimedia presentation skills, performing small group skits – it's an engaging TED Talk atmosphere for kids.

of people **30-100**

Say what you mean

Learning Space Types

Library



Collaboration

FUNCTION	Learning hub for school
FURNITURE	Moveable tables, Varied seating, Soft seating, Focused areas
FLEXIBILITY	High
TECHNOLOGY	WiFi, Power, Screensharing, Projection
LEARNING STYLE	Collaborative, Social, Individual, Research

The learning commons is the evolution of the library or media center. Much more than just a place to store books or media, the learning commons is a multipurpose learning emporium staffed to provide access to content, research, and world of literature and reading.

of people **20-75**

Nook



collaboration

FUNCTION	Individual / One-on-One
FURNITURE	Bench / Seat
FLEXIBILITY	Low
TECHNOLOGY	None Required
LEARNING STYLE	Individual / Peer / Tutor / Multiage

A quiet, yet easily accessible space for individual focus work or intimate one on one discussion.

of people **1-2**

Outdoor Play



Natural

FUNCTION	Play, Discovery
FURNITURE	Outdoor Seating, Play-ground equipment
FLEXIBILITY	n/a
TECHNOLOGY	n/a
LEARNING STYLE	Kinesthetic

Natural play extends the learning cycle throughout the entire day through engagement with all of the senses. Play becomes an interaction with tactile surfaces, aromas of native/adapted plants, local geography, and the sounds of nature.

of people **100+**

Outdoor Learning



Natural

FUNCTION	Outdoor learning
FURNITURE	Outdoor seating
FLEXIBILITY	Low
TECHNOLOGY	Rainwater harvesting, Photovoltaic array, Weather station
LEARNING STYLE	Observation, Exploration, Discover, Multiage, Kinesthetic

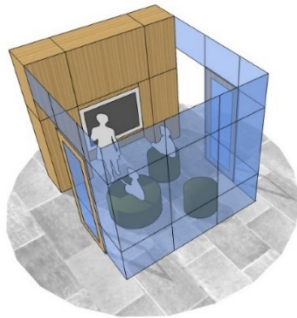
The outdoor classroom has come a long way since the ubiquitous neglected amphitheater. Full of interesting things to monitor and discover, outdoor learning environments are a necessity for connecting children to the natural world.

of people **20-40**

Say what you mean

Learning Space Types

Pod



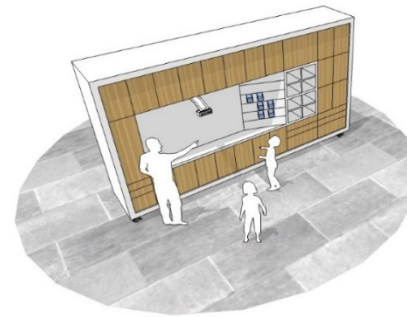
collaboration

FUNCTION	Individual / Small group
FURNITURE	Variety of seating, Writing surface
FLEXIBILITY	High
TECHNOLOGY	Wifi and power, Screenshare
LEARNING STYLE	Individual / Collaborative, Multiage

A small multipurpose pod provides a place for quiet focus work, tutoring, small group screen sharing, and even a global skype portal.

of people **1-4**

Toolbox



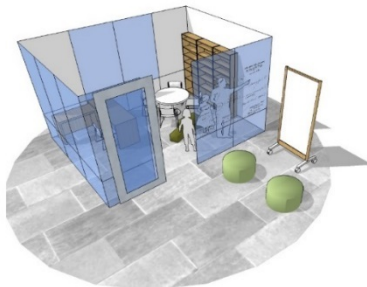
Support

FUNCTION	Resource
FURNITURE	Flexible seating nearby
FLEXIBILITY	High
TECHNOLOGY	Projection, Wifi, Power, Speakers
LEARNING STYLE	Support

An organized and condensed unit will teaching and learning supplies and tools, sometimes on wheels or fixed to a location.

of people **n/a**

Tutorial / Office



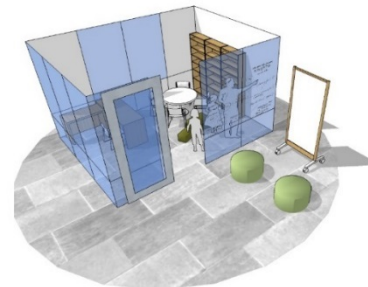
Support

FUNCTION	Resource
FURNITURE	Desk, Small group meeting, Writing surfaces
FLEXIBILITY	Medium
TECHNOLOGY	Wifi, Laptop
LEARNING STYLE	Support

An office for instructional support outfitted with storage, furniture for student tutoring, peer support, and parent meetings.

of people **1-6**

Workroom / Conference



Support

FUNCTION	Resource
FURNITURE	Desks, Small group meeting, Writing surfaces
FLEXIBILITY	Medium
TECHNOLOGY	Wifi, Laptop
LEARNING STYLE	Support

A meeting room, workspace, or planning area in support

of people **1-6**



**Career Center
Working Group**

Meeting #2
January 29, 2018

**High School
Planning
& Design**

Case Studies: Schools in High-Density Zones

- Land-constrained
- Mixed-use adjacencies
- More vertical than horizontal
- Creative use of outdoor space
- Well-developed ground plane
- Integral to the community experience
- Strong identity, presence
- Simple forms, compact footprint
- Greater reliance on public transportation

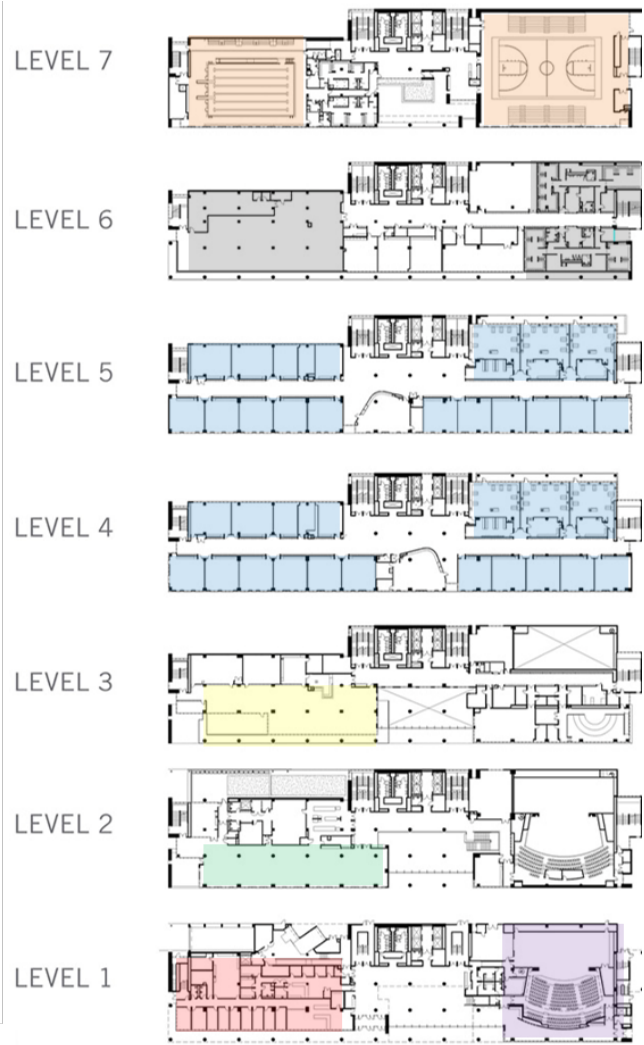
William Jones College Preparatory High School

Chicago



William Jones College Preparatory High School

Chicago



Arthur Phillip High School

Australia



Arthur Phillip High School

Australia



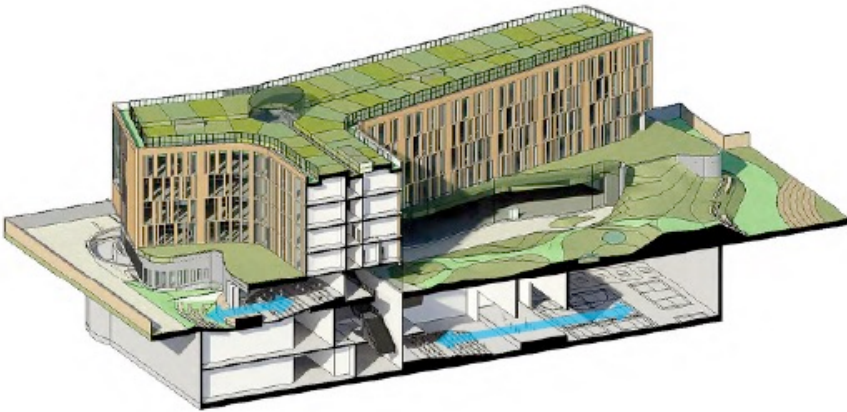
Yuying Secondary School

China



Yuying Secondary School

China



Hunters Point Middle School

New York City



LONG ISLAND

Hunters Point Middle School

New York City



Roy and Diana Vagelos Education Center

Columbia University



Diller Scofidio + Renfro

Roy and Diana Vagelos Education Center

Columbia University

STUDY CASCADE

A network of social and study spaces distributed across oversized landings along an open 14-story stair - a single, interconnected vertical space that extends from the lobby to the top of the building.

Sky Lounge

Intimate and informal gathering space for study groups.

Exterior Terraces

Available for student use at 4th, 8th, 10th, and 13th floors.

Stepped Lounge

A tiered study lounge (on floors 7-8 and 11-12) provides opportunity for formal and informal study.

The Student Commons

A double-height space that features a café, lounge seating, and balconies for both social gatherings and independent study.

Study Spaces

A range of intimate lounge-style and desk areas are distributed throughout the study cascade.

Multi-purpose auditorium

A 275-seat flexible space used for campus-wide events including lectures, screenings, and concerts.

Lobby

The space is formed by a seating area, café, and a "study bar" overlooking the outdoor courts.

SPECIALIZED SPACES

A vertical stack of loft classrooms, laboratories, technical spaces, offices, and controlled environments.

Active Learning Classrooms

Divided by operable partitions, these 30 / 60 person flexible spaces offer indirect sunlight and controlled views through continuous, full height windows. Flexible furniture configurations are made possible by distributed power and data at the floor, and by suspended ceilings.

Administration Suites

Office and support spaces for faculty and administration.

Simulation Center

A specialized zone with mock examination rooms, clinics, and operating rooms.

Anatomy Quad

Suspended booms with integrated screens and task lighting. Large footprint and central location allows for flexible use.

Special Event Space

190-person classroom / flexible event space with catering support.

Simulation Suite

An open reception area with debriefing rooms and support spaces, as well as further mock examination rooms, clinics, and operating rooms.

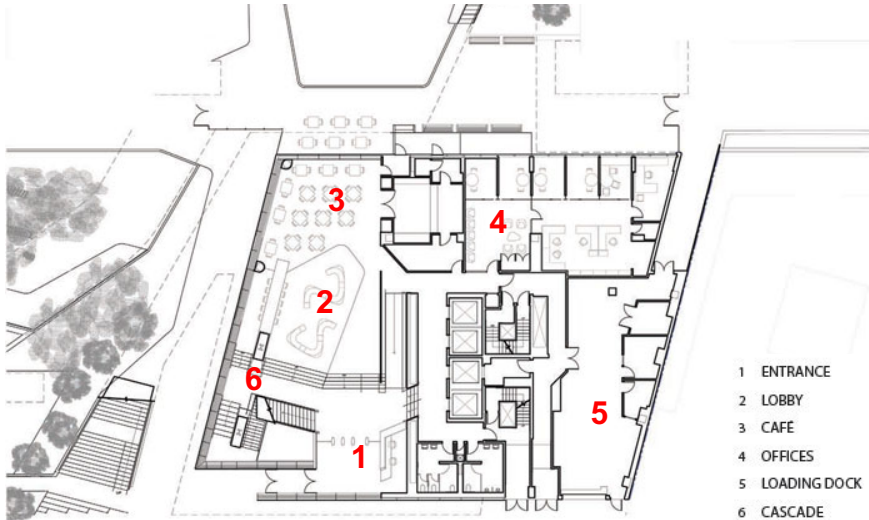
views of the Hudson River.

To Campus



Roy and Diana Vagelos Education Center

Columbia University

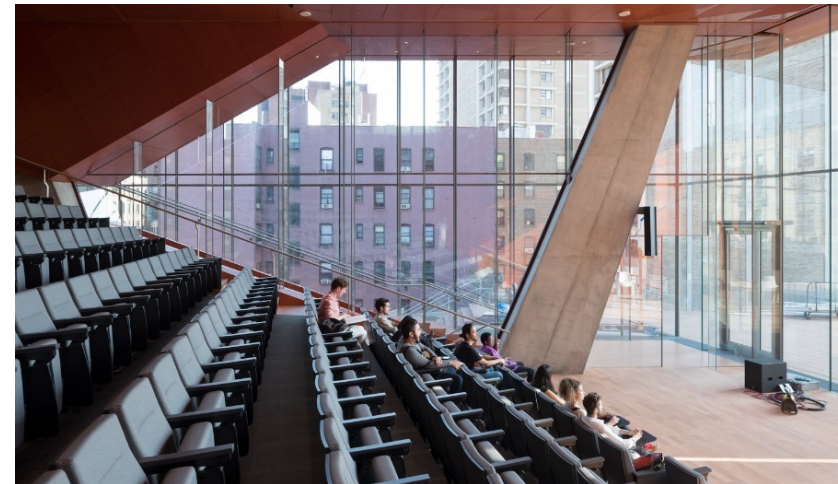


Entry Level Floor Plan

- 1 ENTRANCE
- 2 LOBBY
- 3 CAFE
- 4 OFFICES
- 5 LOADING DOCK
- 6 CASCADE
- 7 TERRACE
- 8 AUDITORIUM

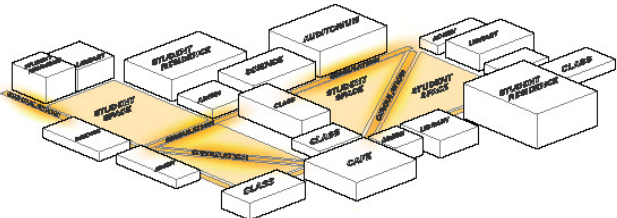


Second Level Floor Plan

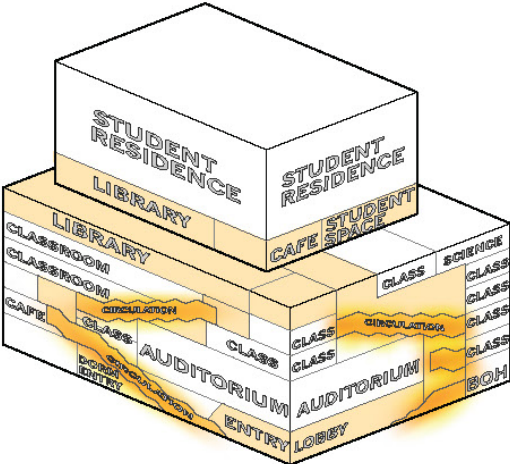


The New School

New York City



TRADITIONAL SUBURBAN CAMPUS

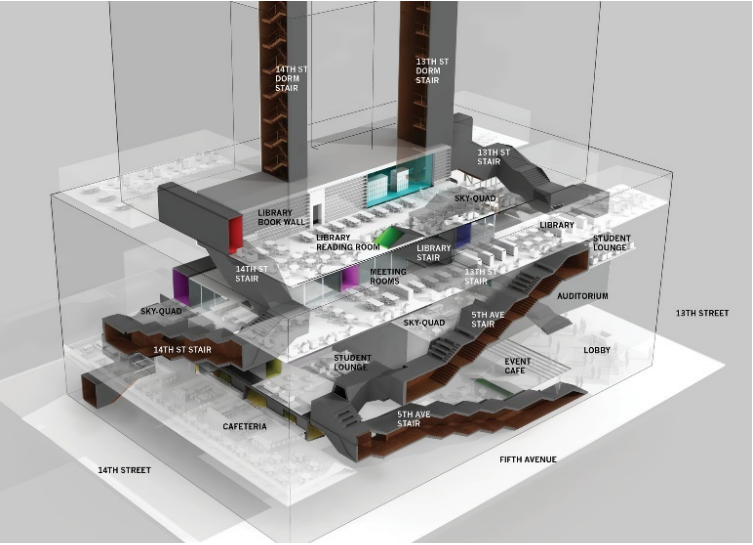


VERTICAL URBAN CAMPUS



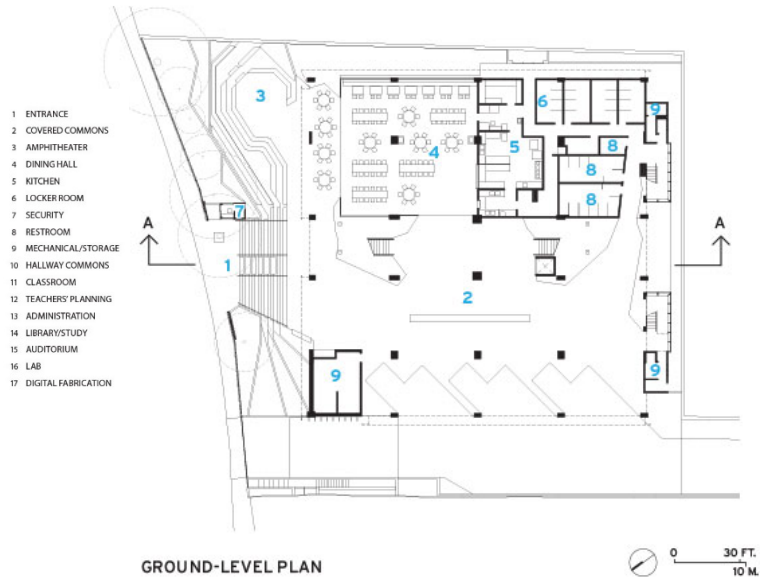
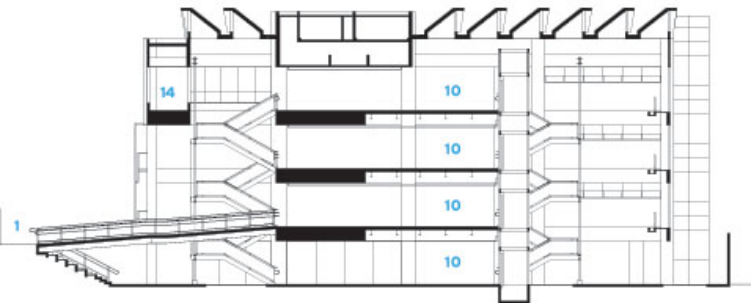
The New School

New York City



Osasco High School

Brazil



Osasco High School

Brazil

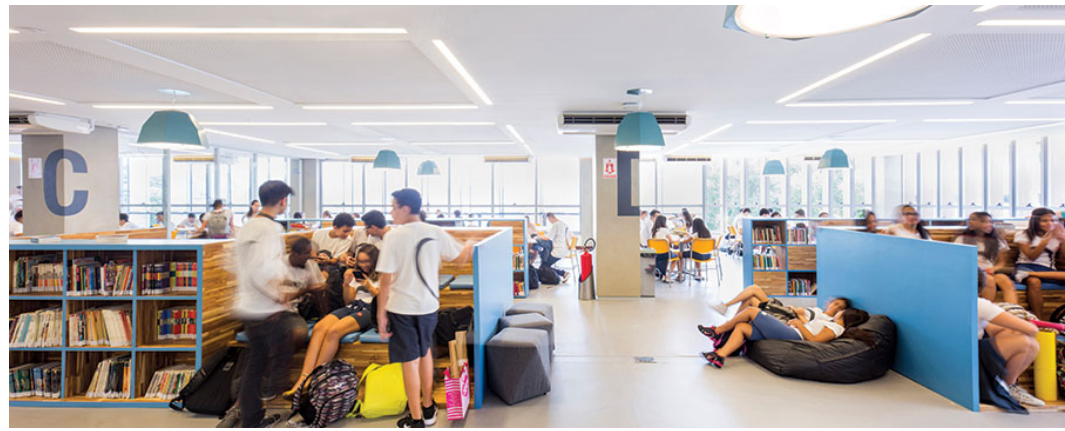


FOURTH-LEVEL PLAN 0 30 FT. 10 M.



SECOND-LEVEL PLAN 0 30 FT. 10 M.

- 1 ENTRANCE
- 2 COVERED COMMONS
- 3 AMPHITHEATER
- 4 DINING HALL
- 5 KITCHEN
- 6 LOCKER ROOM
- 7 SECURITY
- 8 RESTROOM
- 9 MECHANICAL/STORAGE
- 10 HALLWAY COMMONS
- 11 CLASSROOM
- 12 TEACHERS' PLANNING
- 13 ADMINISTRATION
- 14 LIBRARY/STUDY
- 15 AUDITORIUM
- 16 LAB
- 17 DIGITAL FABRICATION



Hazel Wolf K-8

Seattle, Washington



SITE & FIRST FLOOR PLAN



NAC Architecture

Takeaways:

- **Up, Not Out**
Trading air space for green space
- **Anytime, Anywhere**
All spaces are learning spaces
- **See, Be Seen**
Visual, spatial, social connectivity
- **Future Ready**
If not now, soon
- **Community Mindset**
Connections that reflect, reinforce community priorities
- **Design Matters**
Good design helps connect people to a place and one another

Career Center
Working Group

Meeting #2
January 29, 2018

High School
Planning
& Design

Meeting Objectives / Agenda

**Career Center
Working Group**

Meeting #2
January 29, 2018

**High School
Planning
& Design**

- **Inform the Process**
How has facility design evolved to support learning?
- **Clarify the Challenge**
What does it mean to “optimize” the Career Center site?
- **Receive Guidance**
What informs the design concepts?

The background of the slide is a faded photograph of a busy workshop or classroom. Several students are visible, some sitting on the floor and others standing, engaged in hands-on work. A large, stylized gear graphic in blue and yellow is overlaid on the left side of the image. The overall atmosphere is one of active learning and collaboration.

ARLINGTON CAREER CENTER

MISSION

Instill a passion for learning by doing.

VISION

A dynamic community of self-determined learners connected through authentic, client-based work.

ARLINGTON CAREER CENTER

CTE

ALT

AT

Academic
Academy

HILT
Institute

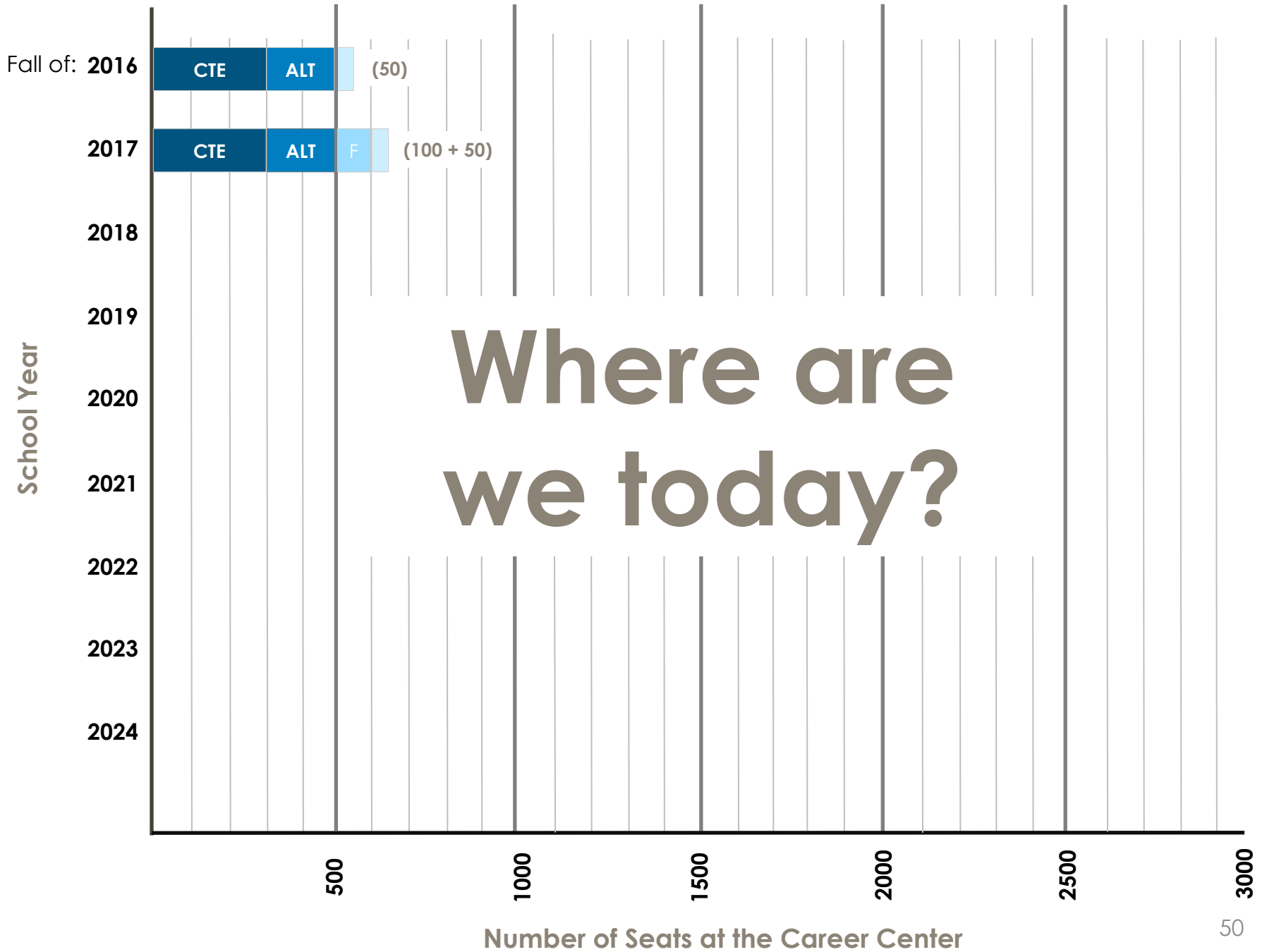
Program for
Employment
Preparedness

Engineering
Industrial Trades

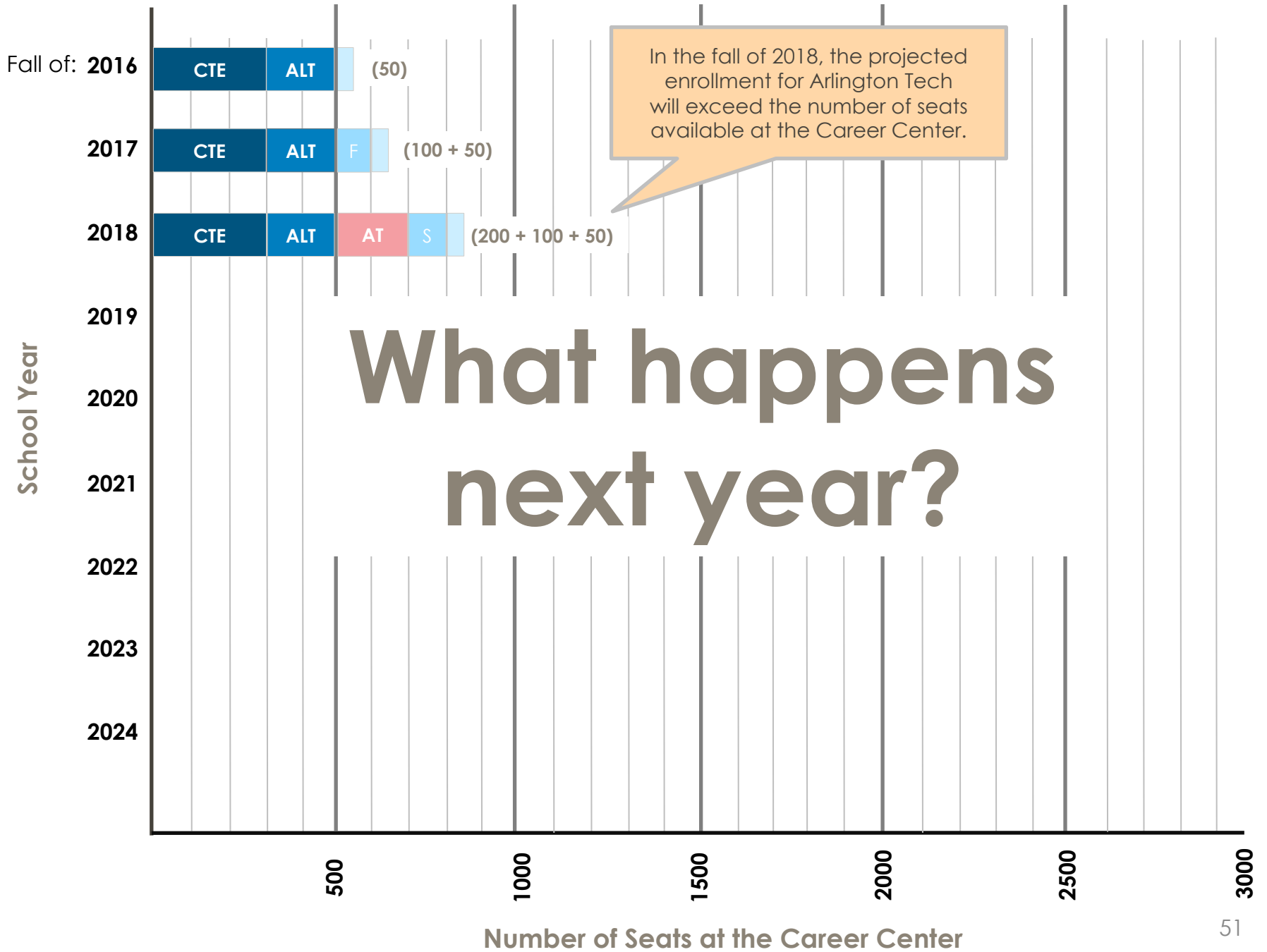
IT/Digital Media

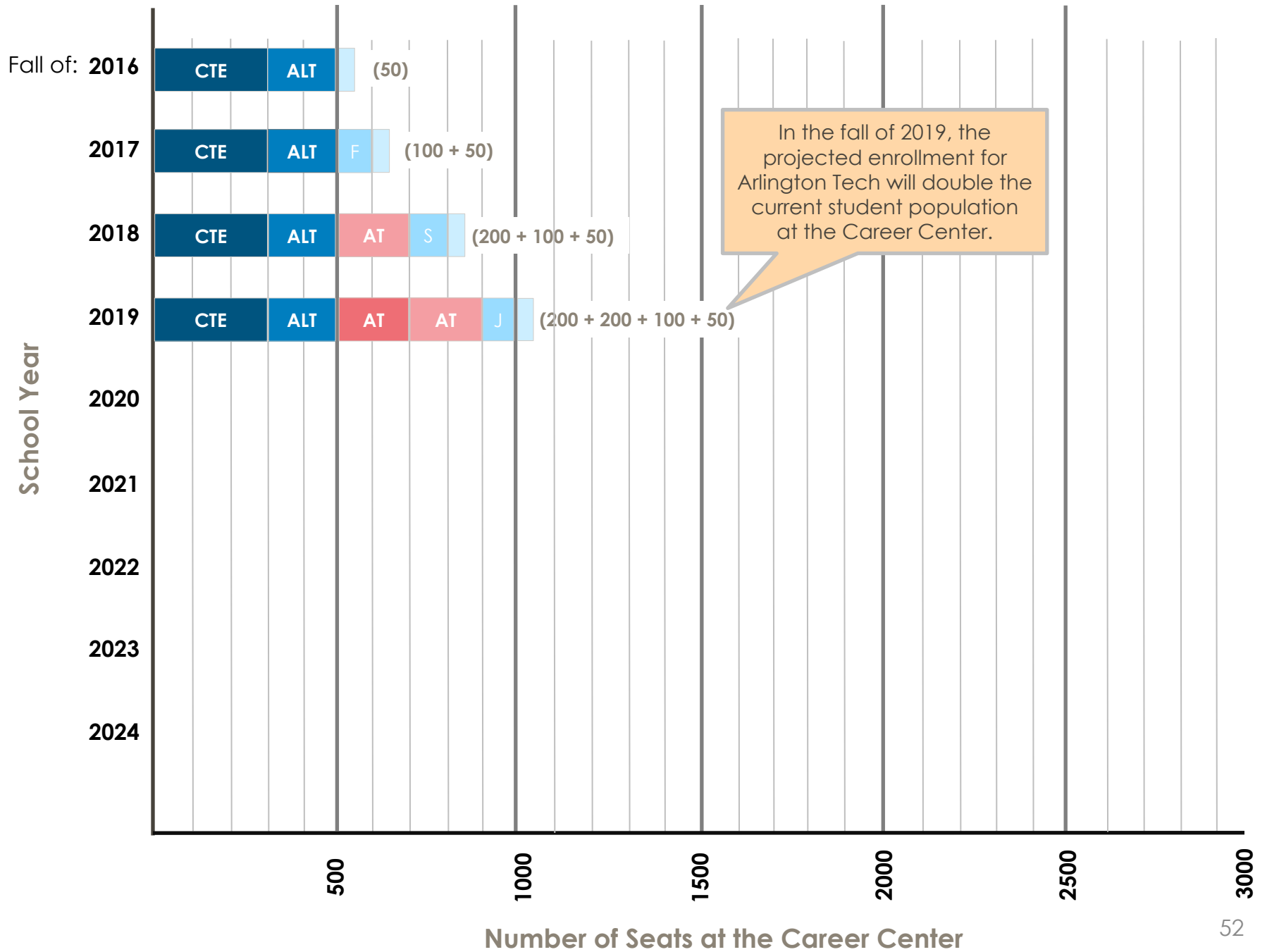
Health/Medical

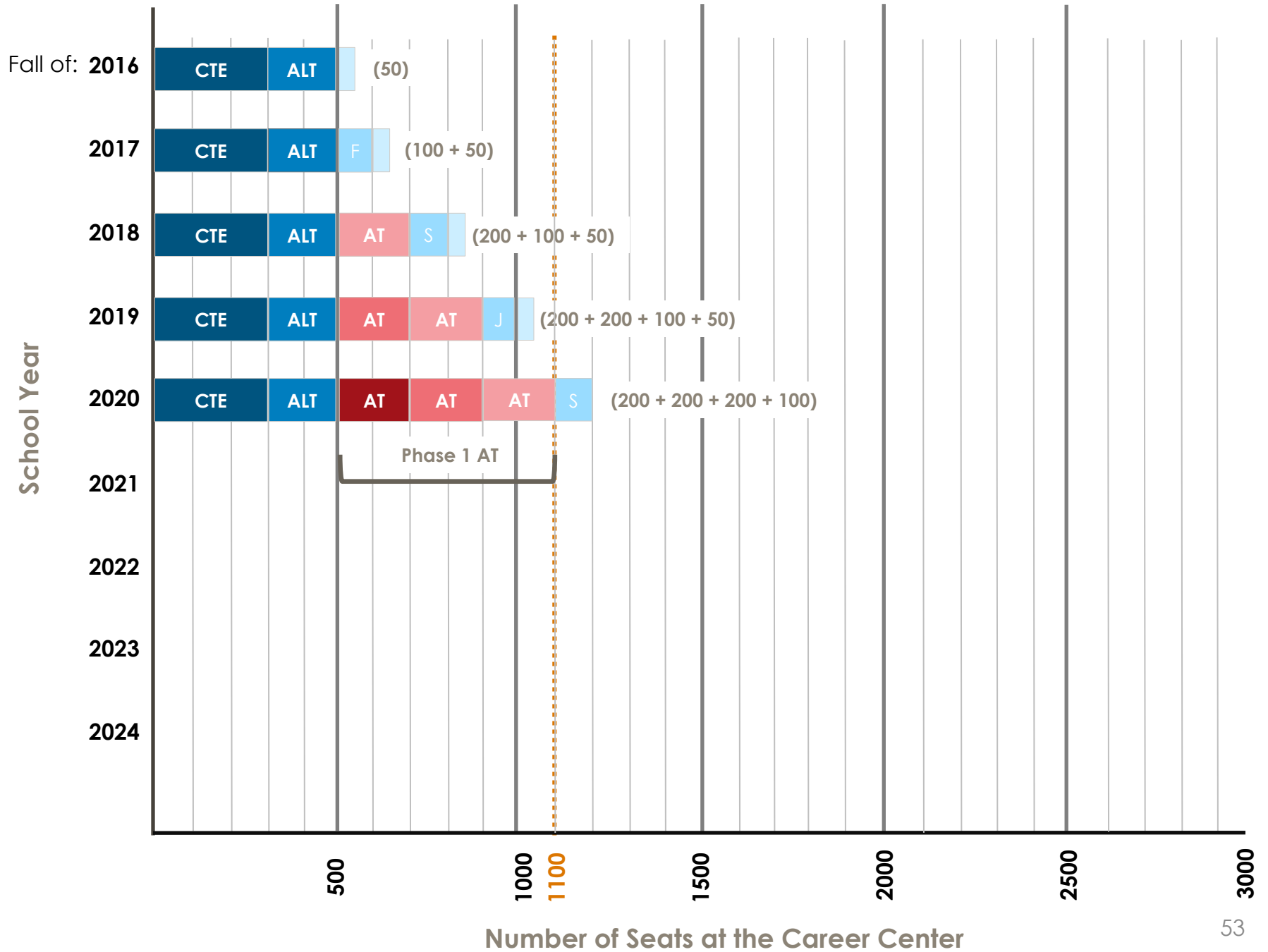
Human/
Public Service

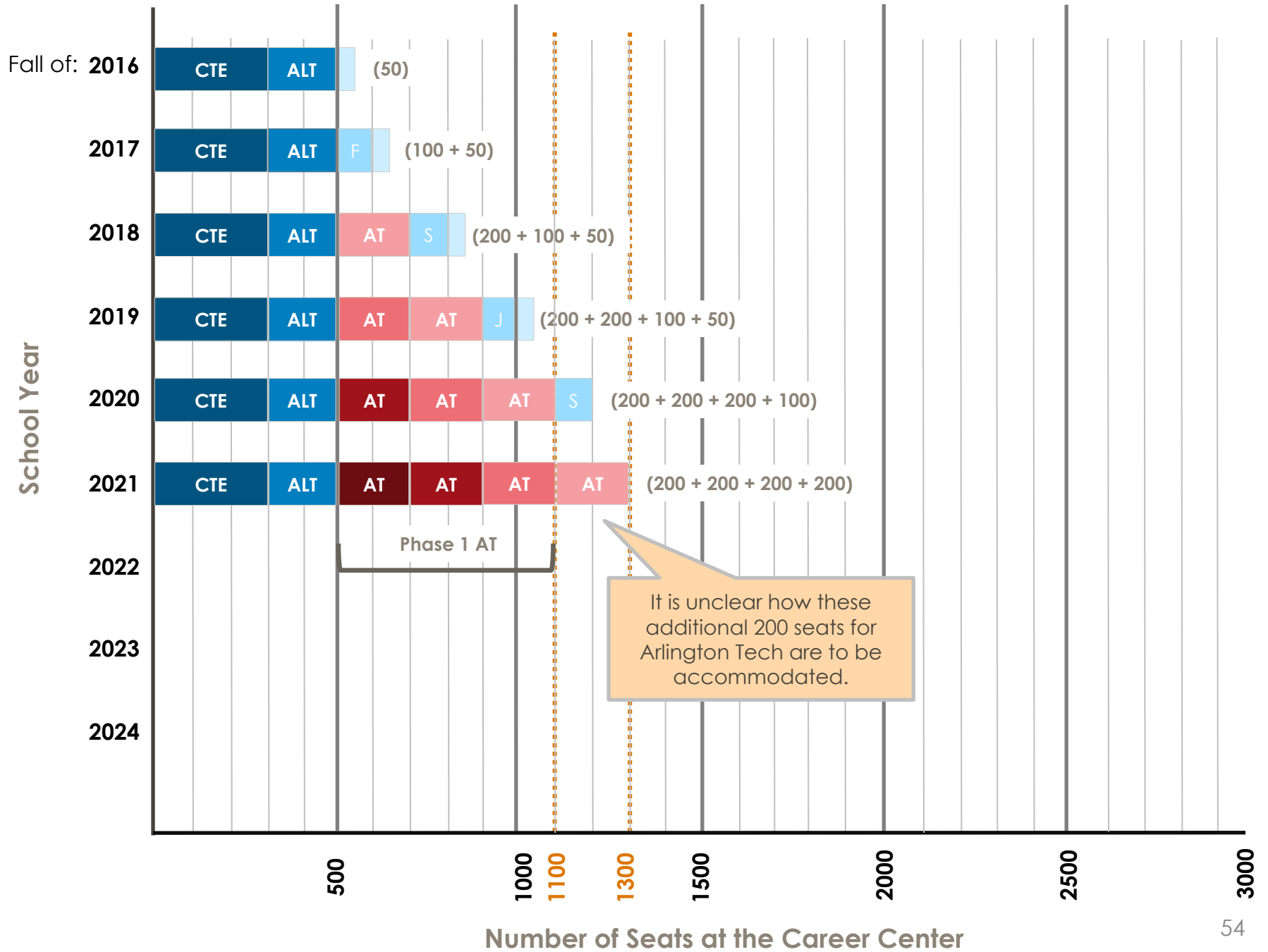


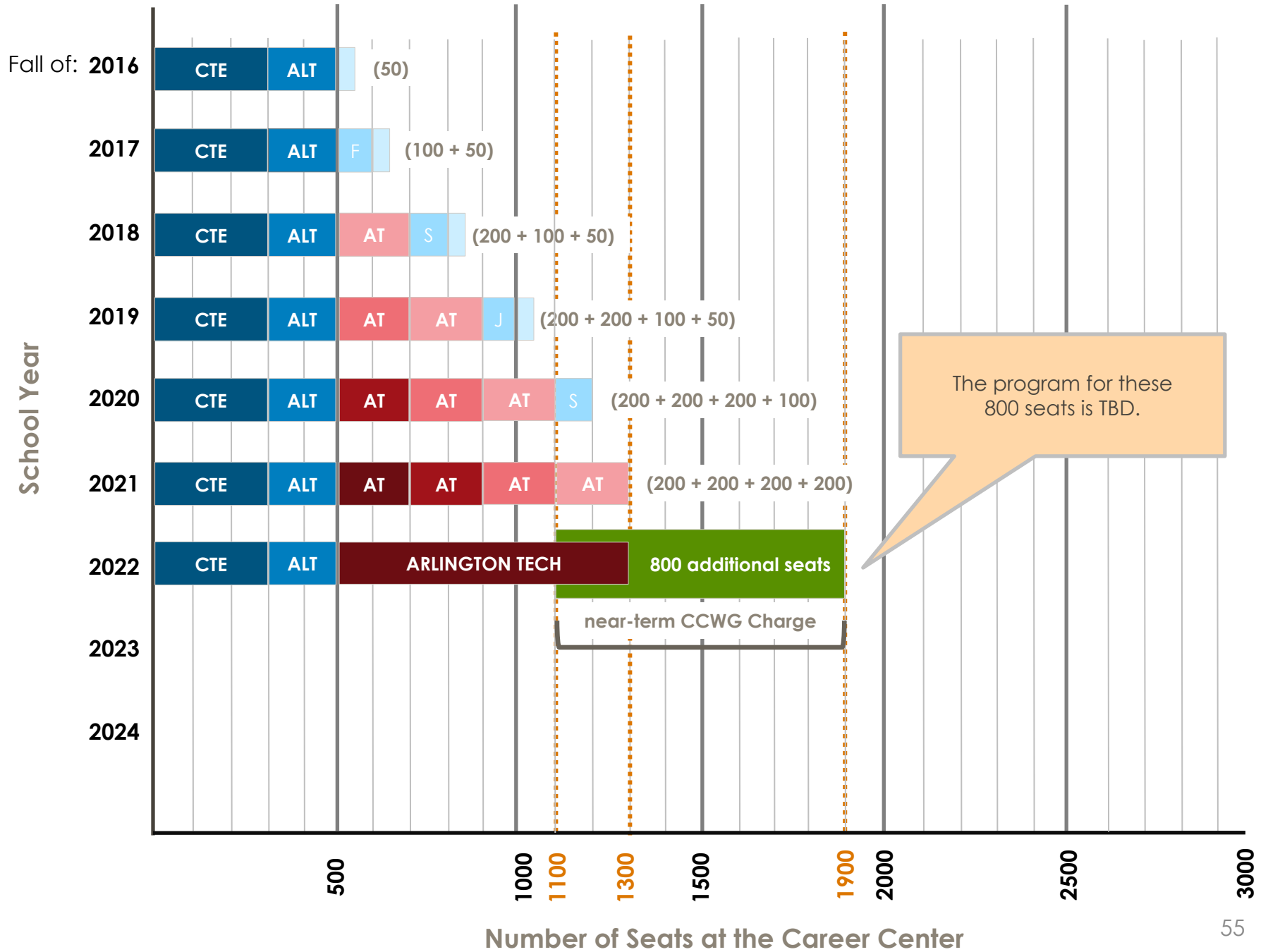
Where are
we today?



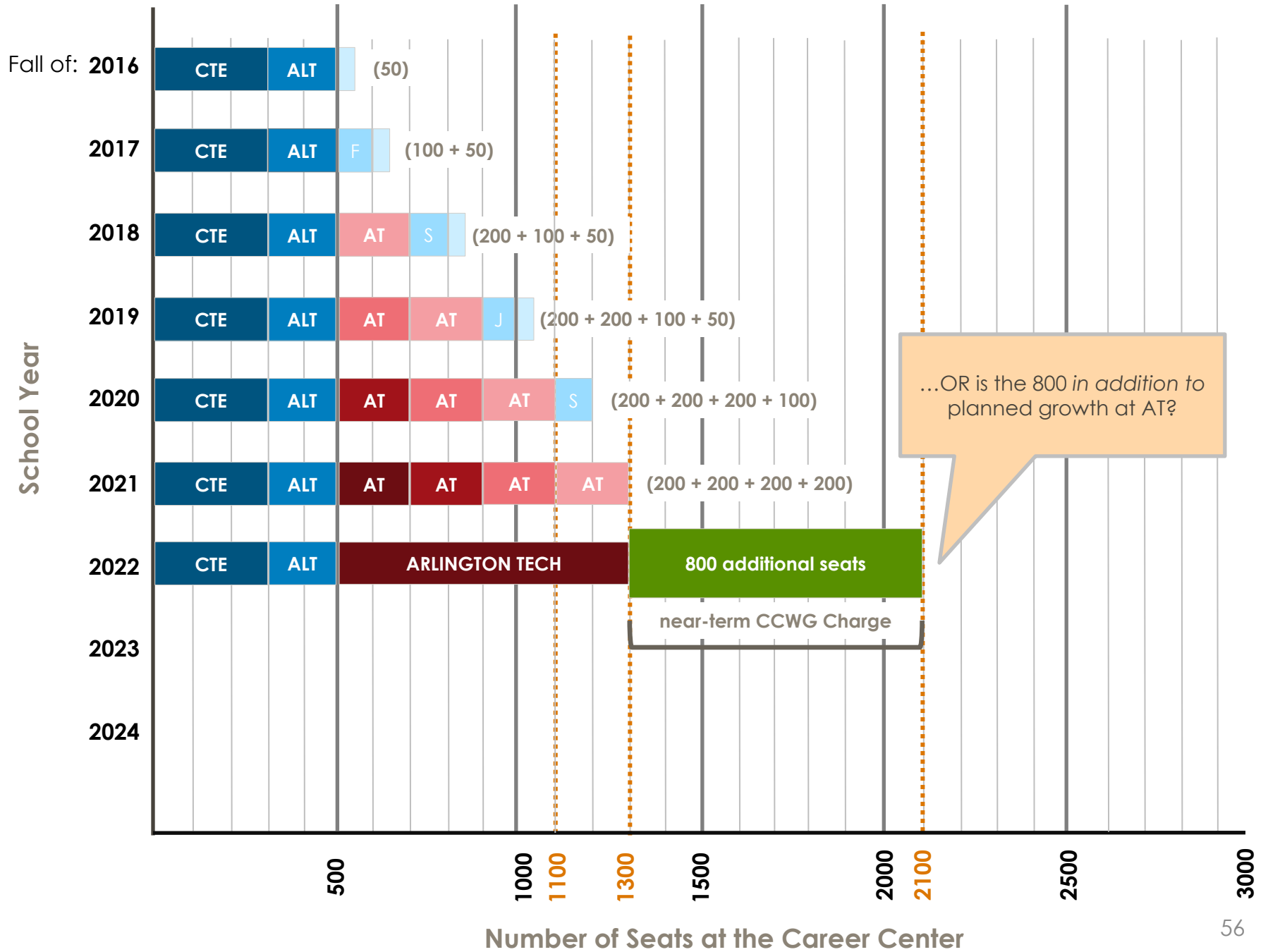


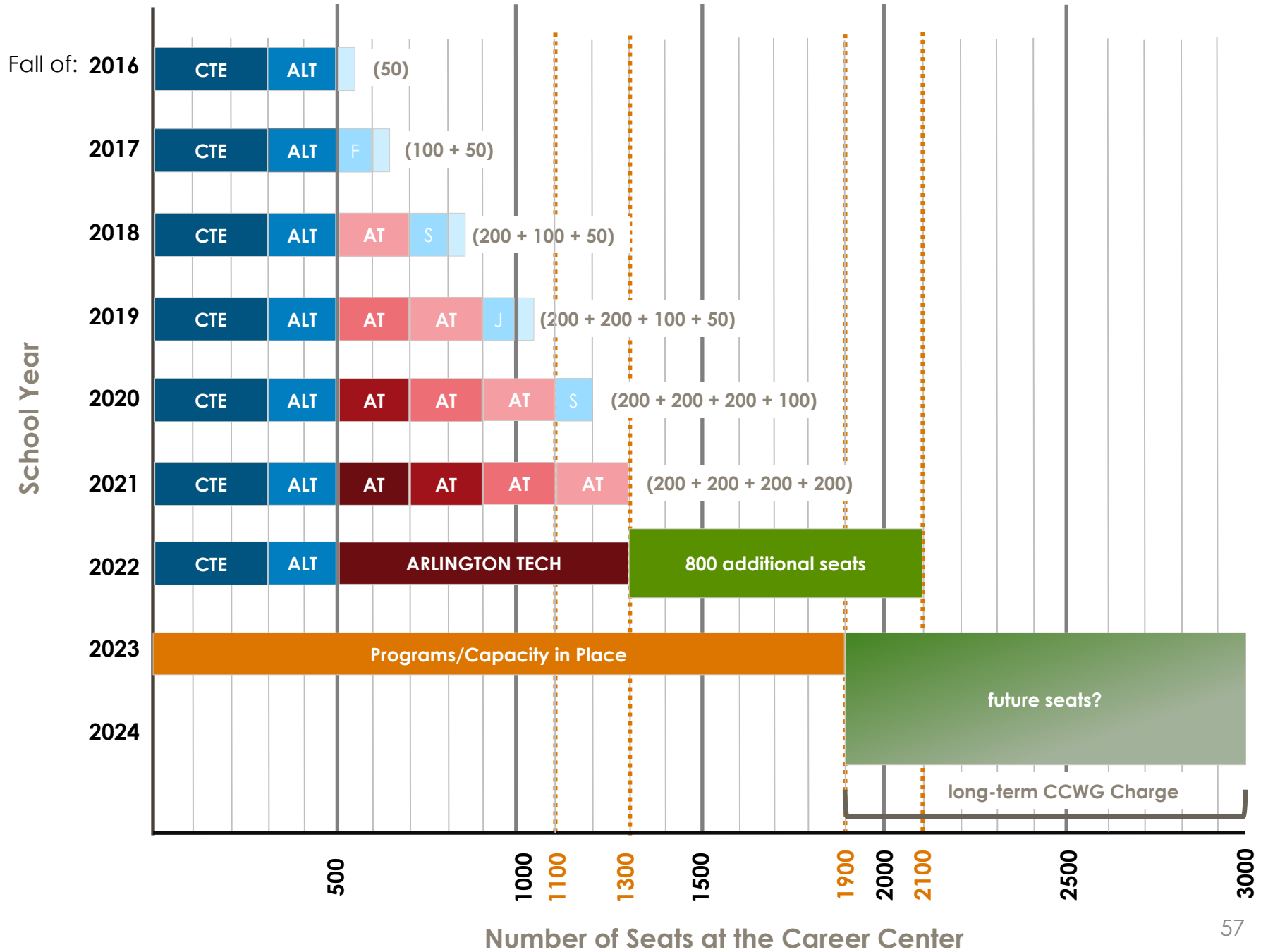




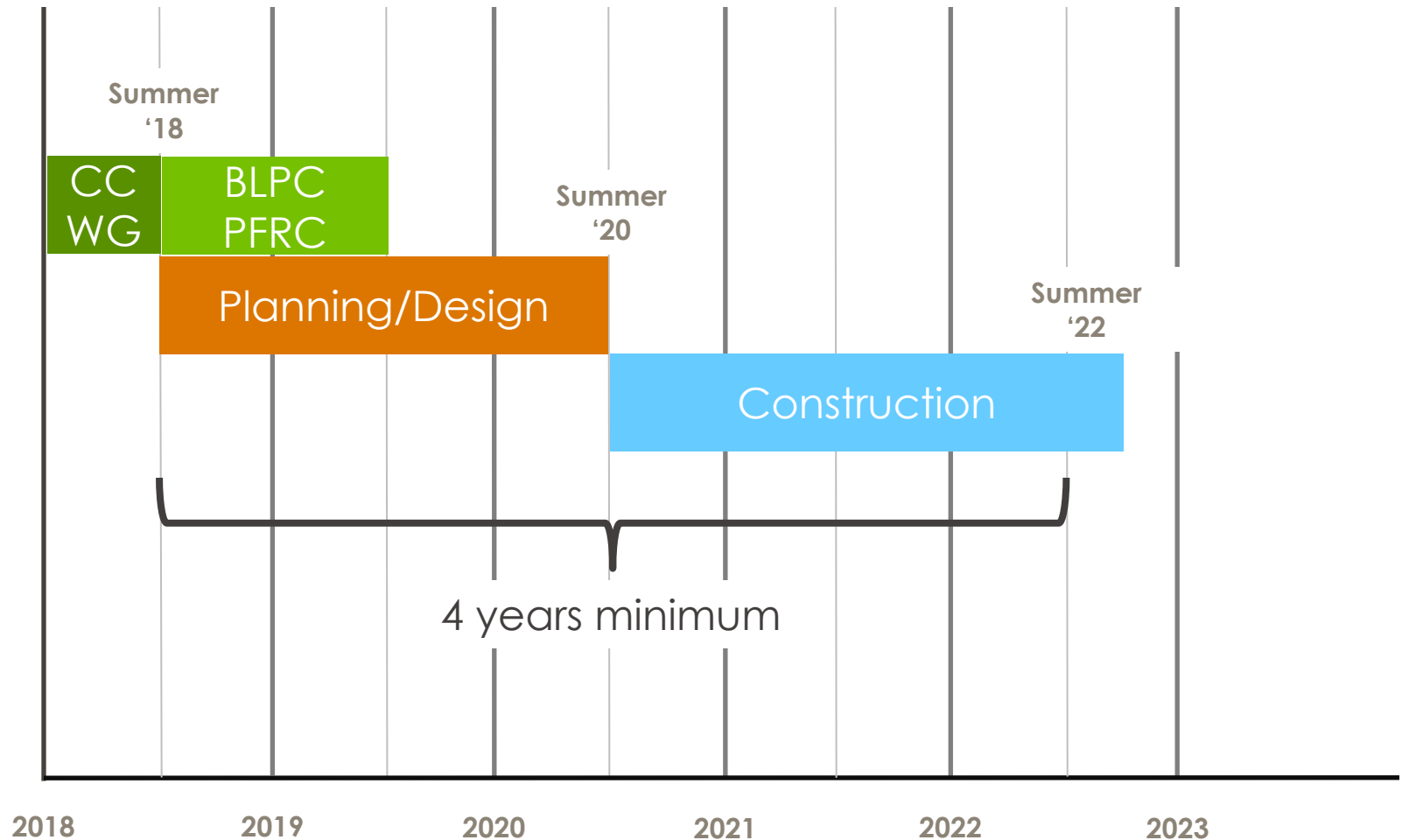


The program for these 800 seats is TBD.

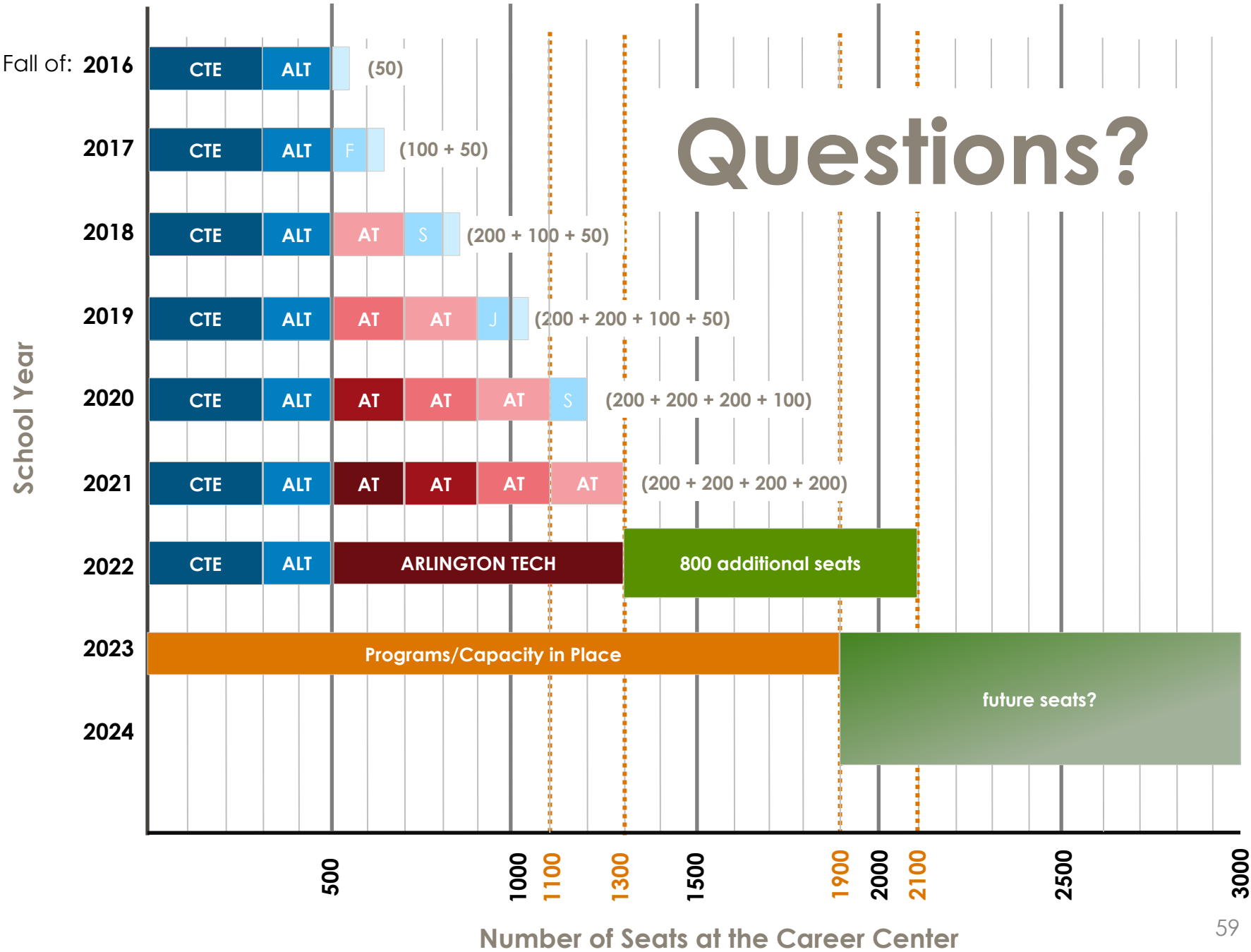




Planning/Design/Construction Timeline



Questions?



Meeting Objectives / Agenda

**Career Center
Working Group**

Meeting #2
January 29, 2018

**High School
Planning
& Design**

- **Inform the Process**
How has facility design evolved to support learning?
- **Clarify the Challenge**
What does it mean to “optimize” the Career Center site?
- **Receive Guidance**
What informs the design concepts?

MEETING SCHEDULE

Career Center
Working Group

Meeting #2
January 29, 2018

Meeting 1

Meeting 2

1/29

Meeting 4

Meeting 5*

2/21

1/26

High School
Planning
& Design

***Stantec to provide design concepts
per guidance from CCWG.**

PLANNING AND DESIGN

- Vision / Guiding Principles
- Student Capacity
- Instructional Program
- Educational Specifications
- Site, Civic, and Cultural Context

Career Center
Working Group

Meeting #2
January 29, 2018

High School
Planning
& Design

PLANNING AND DESIGN

- Vision / Guiding Principles
- Student Capacity
- Instructional Program
- Educational Specifications
- Site, Civic, and Cultural Context

Career Center
Working Group

Meeting #2
January 29, 2018

High School
Planning
& Design

PLANNING AND DESIGN

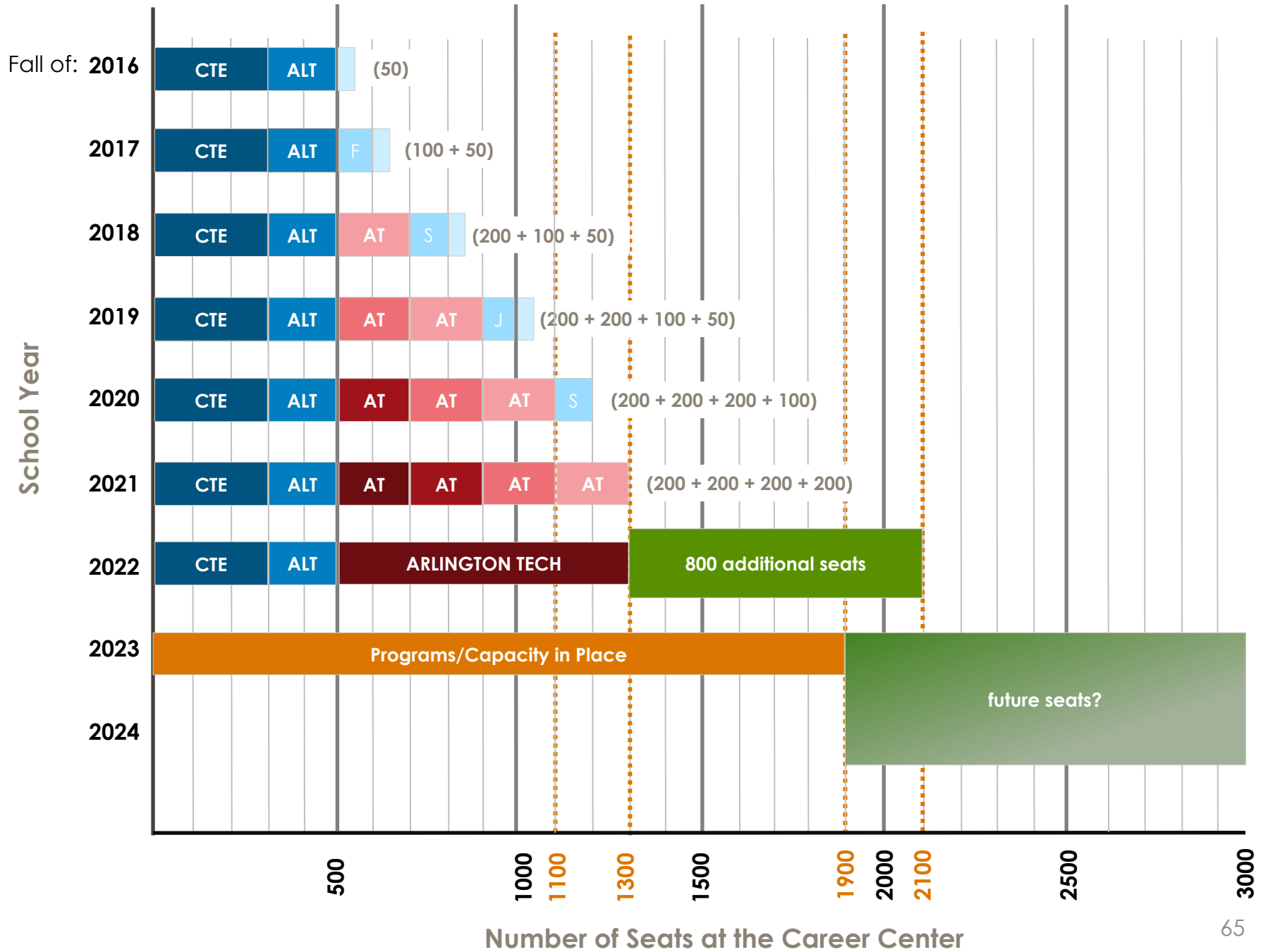
- Student Capacity

Given our charge and all that you know, what's our target?

Career Center
Working Group

Meeting #2
January 29, 2018

High School
Planning
& Design



PLANNING AND DESIGN

- Vision

Above all else,
what **must** this project do?

After the must-dos,
what else **should** it do?

In addition,
what else **could** this project do?

Career Center
Working Group

Meeting #2
January 29, 2018

High School
Planning
& Design

Career Center
Working Group

Meeting #2
January 29, 2018

High School
Planning
& Design



Derk Jeffrey, AIA
Bill Bradley, PhD, AIA