



**Board of Trustees Meeting**

**January 24, 2017  
5:30 PM**

**Butler Farm Campus**

**NEW HORIZONS REGIONAL EDUCATION CENTERS**

**BOARD OF TRUSTEES  
REPRESENTING**

**GLOUCESTER**

**HAMPTON**

**NEWPORT NEWS**

**POQUOSON**

**WILLIAMSBURG/JAMES CITY COUNTY**

**YORK COUNTY**





**AGENDA**  
**BOARD OF TRUSTEES MEETING**  
**January 24, 2017**  
**5:30 PM - Butler Farm Campus**

<u>AGENDA NO.</u>	<u>SUBJECT</u>	<u>PRESENTER</u>	<u>RECOMMENDATION</u>
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CALL TO ORDER/WELCOME		Ms. Simonds	
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WELCOME APPOINTED/REAPPOINTED BOARD MEMBERS		Ms. Simonds	
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SELECTION OF VICE-CHAIR		Ms. Simonds	
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BOARD MEMBER RECOGNITION		Mr. Johnson	
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**PUBLIC COMMENT:** (Citizens who wish to address the board should complete a speaker's card through the Clerk of the Board.)

ANNOUNCEMENT OF CHANGES IN THE AGENDA		Mr. Johnson	
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**CONSENT AGENDA:** (Items listed under this heading are approved by one motion without discussion unless a member of the Board or Superintendent requests that any item be removed from the consent agenda and voted upon separately.)

2017-38	Approval of Minutes – December 20, 2016	Ms. Simonds	Action
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2017-39	Personnel Report	Mr. Johnson	Action
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2017-40	Financial Report	Mr. Ragland	Action
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**BOARD ACTION:**

2017-41	17-18 Budget Overview	Mr. Johnson	Action
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**BOARD DISCUSSION:**

2017-42	CTE Master Plan and Timeline	Mr. Johnson	Information
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2017-43	Directors Report	Mr. Johnson	Information
	A. February is Board Appreciation Month		
	B. February is CTE Month		
	C. WL CTE Renovation		

2017-44	Announcements and Information	Mr. Johnson	Information
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2017-45	Discussion of Current Issues for Board Members and/or Superintendents		
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2017-46	Closed Session		
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ADJOURNMENT



January 24, 2017

TO: Members of the Board of Trustees and Superintendents

FROM: Joseph Johnson, Executive Director   
Shelly Simonds, Chairman

SUBJECT: **2017-38 Approval of Minutes – December 20, 2016**

The Chairman and I recommend that the minutes from the December 20, 2016 New Horizons Regional Education Centers Board of Trustees meeting be approved as presented.

Attachment



New Horizons Regional Education Centers  
Board of Trustees Meeting Minutes  
December 20, 2016

New Horizons Regional Education Centers' Board of Trustees held its regularly scheduled meeting on December 20, 2016, at the Woodside Lane campus. The meeting was called to order by the Chairman, Ms. Shelley Simonds, at 5:35 PM.

**Board Members Present:**

Ms. Shelly Simonds  
Mrs. Julie Hummel  
Dr. Reginald Woodhouse  
Mr. Charles Records

*Dr. Robert George Absent  
Poquoson - Vacant*

**Superintendents Present:**

Dr. Olwen Herron  
Dr. Ashby Kilgore  
Dr. Jeffrey Smith  
Dr. Walter Clemons

*Dr. Jim Carol attended in the place of Dr. Shandor  
Dr. Brandon Ratliff attended in place of Dr. Parish*

**Public Comment:** There were no public comments.

**Announcement of Changes in the Agenda:** Mr. Johnson announced that the Woodside Lane CTE Renovation is listed as an "Information Item" however it should be listed as an "Action Item." Mr. Johnson also stated that a Closed Session was not needed.

**Presentations:**

**2017-27 Newport Academy and Center for Autism**

Mrs. Wood, Special Education Director introduced Mrs. Shante Harvey, Coordinator for Newport Academy and Ms. Samantha Rozakis, Coordinator for Center for Autism. Mrs. Harvey and Ms. Rozakis gave a video presentation on strategies used at Newport Academy to improve literacy and numeracy outcomes. Strategies include disaggregating data from scholastic reading and math inventories; goal setting; collaborating and sharing resources; communicating progress; and celebrating student accomplishments. A brief discussion followed commending staff for the great job they are doing.

**Consent Agenda:**

**2017-28 Approval of Minutes – October 25, 2016**

Ms. Simonds stated we needed to pull the Minutes for a separate vote as Mr. Records was not in attendance at the October meeting therefore Dr. Clemons will need to vote on his behalf. Mrs. Hummel made a motion to approve the Minutes as presented. Dr. Clemons requested that the October minutes reflect that he abstained from voting, in Mr. Record's absence, regarding the



Woodside Lane Renovation Project. Mrs. Hummel amended her motion based upon correction as stated by Dr. Clemons, Dr. Woodhouse seconded the motion. The motion carried 4-0.

### **2017-29 Personnel Report & 2017-30 Financial Report**

Ms. Simonds asked if there were any questions for the Consent Agenda items 2017-29 and 2017-30. There were none. Dr. Woodhouse made a motion to approve items 2017-29 and 2017-30 of the Consent Agenda as presented and Mr. Records seconded the motion. The motion carried 4-0.

### **BOARD ACTION:**

#### **2017-31 Audit Report**

Mr. Ragland presented a Statement of Activities for the five months ending November 30, 2016. Diane Y. Smith, CPA, PC reviewed the Independent Auditors Report and financial statements for the year ending June 30, 2016. After a brief discussion Ms. Simonds asked for a motion to approve the Audit Report. Mr. Records made a motion to approve the Audit Report as presented and Mrs. Hummel seconded the motion. The motion carried 4-0.

### **BOARD DISCUSSION:**

#### **2017-32 Woodside Lane CTE Renovation**

Mr. Johnson stated that the Board of Trustees at the October 25, 2016 meeting designated \$4,300,000 of Board Net Assets for the WL CTE Renovation. However upon further review of Board Assets presented at the March 26, 2016 meeting it was determined that the total Board Assets were accurate but the Recap of the Board Designated Reserves failed to account for the \$1,027,842 of Board Assets being held by PNC Bank as Debit Service on the new Special Education Center. Therefore, the Board is being requested to approve a reduction in the Net Assets for the WL CTE Renovation to \$3,325,712 along with the \$208,267 designated Technology Funds (E-rate).

Mr. Johnson stated Ritchie-Curbow Construction and representatives met with the Superintendents, staff and himself to determine how the project could cut approximately \$900,000. A diagram included in the board book illustrates the adjustments of the renovation in Phase 1 and Phase 2 and future expansion. Discussion included timeframes for which Mr. Johnson stated all areas needed for school to start in the fall will be completed with the remainder of Phase 1 to be completed by December 2017. Future expansion will either be contracted out, completed by student training programs, and/or facilities staff.

Ms. Simonds asked if there were any other questions or comments. There were none. Ms. Simonds made a motion to approve the \$3,325,712 budget for the WL CTE Renovation. Mrs. Hummel seconded the motion. The motion carried 4-0.

#### **2017-33 Budget Planning Process**

Mr. Johnson presented the Budget Planning Process for SY 2017-2018 for review and discussion. He stated the process has already been started to develop the budget, initiatives and strategies. He stated that in January after meeting with the Superintendents he will be ready to bring a budget outline and draft Cost Allocation to the Board to be included in the divisional

development process. A draft budget will be brought to the March meeting with approval of the 2017-2018 Budget in May.

#### **2017-34 Directors' Report**

- A. 2017-2018 Regional Calendar** – Mr. Johnson stated that the regional calendar committee has met with the calendar representatives and at this time all divisions are on the same schedule and the committee has already begun to work on the 2018-2019 calendar year. He added that the objective of the calendar committee is to create a regional calendar with the same key dates (start date, end date, Thanksgiving break, Winter break, Spring break and regional staff development day). The benefit of this is for the divisions to have commonality for staff with students in other divisions and professional development training for working with other divisions.
- B. Career Expo** – Mr. Johnson stated that the Career Expo, sponsored by the Peninsula Chamber of Commerce and the Peninsula Council for Workforce Development is scheduled for March 2 at the Convention Center. He added that school divisions send a number of juniors and seniors thinking about their career process to meet with different businesses and participate in mock interviews and breakout sessions on financial planning and workplace readiness.

#### **2017-35 Announcements and Information**

Mr. Johnson encouraged Board members and Superintendents to read the latest newsletters at their convenience. He pointed out the Alcoa Grant focuses on Project Base Learning for the new Academy for Advanced Technical Careers. He stated earlier in the day the Academy Business Council members met with school divisional counselors and talked about the academy clusters, jobs and career opportunities, and how to reach students and parents about these career options. He also commented on the STEM students who participated in the conference in Florida and the research Dr. Woo is conducting in his classroom.

#### **2017-36 Discussion of Current Issues for Board Members and/or Superintendents**

There was no further discussion.

#### **2017-37 Closed Sessions**

A closed session was not required.

#### **Adjournment**

The meeting was adjourned at 6:39 P.M.

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Shelly Simonds, Board Chair

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Angela Standley, Clerk of Board



January 24, 2017

TO: Members of the Board of Trustees and Superintendents

FROM: Joseph Johnson, Executive Director 

SUBJECT: **2017-39 Personnel Report**

I recommend that the Board accept the attached Personnel Report as presented.

Attachment



**Board of Trustees Meeting  
Human Resources Report  
January 24, 2017**

***NEW HIRES***

NAME	PROGRAM	TITLE	DATE	ACTION
Brown, Sarah	Center for Autism	Teacher Assistant	1/09/2017	New Hire
Bynum, Neteka	Center for Autism	Teacher Assistant	1/09/2017	New Hire
Massenburg, Lisa	Center for Autism	Teacher Assistant	1/09/2017	New Hire
Owens, Karen	Newport Academy	Teacher	1/18/2017	New Hire

***RESIGNATIONS***

NAME	PROGRAM	TITLE	DATE
Champagne, Shavon	Center for Autism	Teacher Assistant	12/22/2016
Woodley-Burke, Kiara	Center for Autism	Teacher Assistant	12/22/2016

***RECRUITMENT***

POSITION	DEPARTMENT	LOCATION
Administrative Secretary	Newport Academy	Woodside Lane Campus
Facilities Maintenance Specialist	Plant Services	Butler Farm and Woodside Lane Campus
Special Education Teacher	Newport Academy	Woodside Lane Campus
Auto Body Instructor-Part Time	Center for Apprenticeship and Adult Training	Woodside Lane Campus





January 24, 2017

TO: Members of the Board of Trustees and Superintendents

FROM: Joseph Johnson, Executive Director  
Donald Ragland, Finance Director

SUBJECT: **2017-40 Financial Report**

Mr. Ragland and I recommend that the Board accept the attached Statement of Activities for six months ending December 31, 2016 as presented.

Attachment

# NEW HORIZONS REGIONAL EDUCATION CENTERS

## Operating Fund

### Statement of Activities

Six Months Ended December 31, 2016

	<u>BUDGET</u>	<u>YEAR TO DATE</u>	<u>PROJECTED FOR REMAINDER OF FISCAL YEAR</u>	<u>TOTAL YTD &amp; PROJECTED REMAINDER SY 17</u>	<u>OVER (UNDER) BUDGET AS OF 12-31-16</u>	<u>YTD PERCENT</u>
<b><u>REVENUE</u></b>						
<i>State Funds</i>	\$ 614,000	\$ 226,615	\$ 387,385	\$ 614,000	\$ (387,385)	36.9%
<i>Local Funds:</i>						
<i>Career &amp; Technical</i>	3,589,912	2,452,856	1,137,056	3,589,912	(1,137,056)	68.3%
<i>Governor's School</i>	959,687	959,687	-	959,687	-	100.0%
<i>Special Education</i>	10,079,128	5,145,763	4,933,365	10,079,128	(4,933,365)	51.1%
<i>Counseling Center Contribution</i>	78,600	78,600	-	78,600	-	100.0%
<i>Adult Education</i>	461,310	352,759	108,551	461,310	(108,551)	76.5%
<i>Interest</i>	8,000	250	7,750	8,000	(7,750)	3.1%
<i>Perkins Funds</i>	50,000	-	50,000	50,000	(50,000)	0.0%
<i>TNCC Lease</i>	61,020	25,425	35,595	61,020	(35,595)	41.7%
<i>E-Rate Funds</i>	148,000	-	148,000	148,000	(148,000)	0.0%
<i>Other</i>	7,000	24,248	(17,248)	7,000	17,248	346.4%
<b>TOTAL REVENUE</b>	<b>16,056,657</b>	<b>9,266,203</b>	<b>6,790,454</b>	<b>16,056,657</b>	<b>(6,790,454)</b>	<b>57.7%</b>
<b><u>EXPENDITURES</u></b>						
<i>Central Office</i>	966,174	417,558	548,616	966,174	(548,616)	43.2%
<i>Butler Farm Campus:</i>						
<i>Career &amp; Technical</i>	2,292,296	926,471	1,365,825	2,292,296	(1,365,825)	40.4%
<i>Governor's School</i>	1,270,952	515,884	755,068	1,270,952	(755,068)	40.6%
<i>Woodside Lane Campus:</i>						
<i>Career &amp; Technical</i>	1,062,179	408,955	653,224	1,062,179	(653,224)	38.5%
<i>Newport Academy</i>	3,792,561	1,264,113	2,528,448	3,792,561	(2,528,448)	33.3%
<i>Center for Autism</i>	4,632,361	2,251,883	2,380,478	4,632,361	(2,380,478)	48.6%
<i>Student Services</i>	614,567	430,892	183,675	614,567	(183,675)	70.1%
<i>Facilities</i>	964,257	568,931	395,326	964,257	(395,326)	59.0%
<i>Adult Education</i>	461,310	273,456	187,854	461,310	(187,854)	59.3%
<b>TOTAL EXPENDITURES</b>	<b>16,056,657</b>	<b>7,058,143</b>	<b>8,998,514</b>	<b>16,056,657</b>	<b>(8,998,514)</b>	<b>44.0%</b>
<b>INCREASE(DECREASE) IN NET ASSETS</b>	<b>\$ -</b>	<b>\$ 2,208,060</b>	<b>\$ (2,208,060)</b>	<b>\$ -</b>	<b>\$ 2,208,060</b>	



January 24, 2017

TO: Members of the Board of Trustees and Superintendents

FROM: Joseph Johnson, Executive Director

A handwritten signature in black ink, appearing to read "Joseph Johnson", is written over the name in the "FROM:" line.

SUBJECT: **2017-41, 17-18 Budget Overview**

The Board of Trustees at the December 20, 2016 meeting approved the 2017-2018 Budget Development Process. The first step was for the Executive Director to meet with the Superintendents in January and to present to the Board of Trustees at its January meeting a Budget Overview with a DRAFT Divisional Cost Allocation for divisions to use as part of its budget development process. The Executive Director will continue dialogue with superintendents and submit a Draft Budget in March, 2017 with the Board Adopting the 2017-2018 NHREC Budget in May.

The Executive Director will review the Budget Overview and Draft Divisional Cost Allocation, as well as how the Cost Allocation is calculated and factors that contribute to a divisional increase or decrease by service area.

The Draft Budget Overview is based upon a 0% salary increase, proposed VRS increase, level Health Insurance premium costs; and implementation of Computer Networking/Cyber Security and Computer Programming Training Courses. NHREC will also experience a \$40,000 revenue loss in state Occupational Prep funding.

The NHREC Executive Director will continue to work with the Superintendents related to pay increases and other initiatives as divisional budgets are developed with their respective Boards with a NHREC 2017-2018 Draft Budget to be submitted in March.

Attachments

## NHREC 2017-2018 BUDGET INITIATIVES

### Expenditure TIER I – No salary increase

Salary Increase (0%)	\$
Health Insurance	\$
VRS increase	\$138,141
Canvas Instructional Platform	\$ 1,500
Computer Network/Cyber Security	
Teacher Salary/Benefits	\$ 90,000
CISCO ASC Affiliation (ECPI)	\$ 1,500
Teacher Certification/Training	\$ 10,000
Supplies/Equipment	\$ 6,500
Computer Programming	
Teacher Salary/Benefits	\$ 90,000
Digital Textbooks	\$ 5,000
Software	\$ 5,000
Supplies/Equipment	\$ 5,000
<i>Technology, Equipment, Furniture, Curriculum</i>	<i>\$250,000 (2016-2017 carryover)</i>
<b>Total Tier I</b>	<b><u>\$352,641</u></b>

**Revenue Reduction (Occupational Prep Funds)      \$ 40,000**

**New Horizons Regional Education Centers**  
**Preliminary Cost Allocation**  
**Year Ending June 30, 2018**

**Division cost**

		Autism	ED	ED/ID	Total Spec Ed	CTE	Gov Sch	Total
Newport News	FY 18	2,856,349	1,509,423	673,512	5,039,283	1,287,721	110,703	6,437,708
	FY 17	3,002,313	1,352,842	684,526	5,039,681	1,204,901	105,956	6,350,538
	Increase(Decrease)	(145,964)	156,581	(11,014)	(398)	82,820	4,747	87,170
	Percent of change	-4.9%	11.6%	-1.6%	0.0%	6.9%	4.5%	1.4%
Hampton	FY 18	1,126,447	964,354	314,305	2,405,107	1,136,329	177,128	3,718,564
	FY 17	1,167,566	826,737	273,810	2,268,113	1,061,391	161,518	3,491,022
	Increase(Decrease)	(41,119)	137,617	40,495	136,994	74,938	15,610	227,542
	Percent of change	-3.5%	16.6%	14.8%	6.0%	7.1%	9.7%	6.5%
York County	FY 18	482,763	251,571	179,603	913,937	829,443	320,167	2,063,547
	FY 17	333,590	413,369	182,540	929,499	724,900	332,082	1,986,481
	Increase(Decrease)	149,173	(161,798)	(2,937)	(15,562)	104,543	(11,915)	77,066
	Percent of change	44.7%	-39.1%	-1.6%	-1.7%	14.4%	-3.6%	3.9%
Wmsbg/JCC	FY 18	442,533	419,284	134,702	996,519	293,459	154,544	1,444,522
	FY 17	333,590	413,369	228,175	975,134	290,695	138,260	1,404,089
	Increase(Decrease)	108,943	5,915	(93,473)	21,385	2,764	16,284	40,433
	Percent of change	32.7%	1.4%	-41.0%	2.2%	1.0%	11.8%	2.9%
Poquoson	FY 18	120,691	-	44,901	165,592	180,899	78,820	425,310
	FY 17	208,494	75,158	45,635	329,287	191,755	68,910	589,952
	Increase(Decrease)	(87,803)	(75,158)	(734)	(163,695)	(10,856)	9,910	(164,642)
	Percent of change	-42.1%	-100.0%	-1.6%	-49.7%	-5.7%	14.4%	-27.9%
Gloucester	FY 18	321,842	209,642	134,702	666,187	127,313	27,898	821,398
	FY 17	250,193	150,316	136,905	537,414	116,271	42,641	696,326
	Increase(Decrease)	71,649	59,326	(2,203)	128,773	11,042	(14,743)	125,072
	Percent of change	28.6%		-1.6%	24.0%	9.5%	-34.6%	18.0%
Totals	FY 18	5,350,625	3,354,274	1,481,725	10,186,624	3,855,165	869,260	14,911,049
	FY 17	5,295,746	3,231,791	1,551,591	10,079,128	3,589,913	849,367	14,518,408
	Increase(Decrease)	54,879	122,483	(69,866)	107,496	265,252	19,893	392,641
	Percent of change	1.0%	3.8%	-4.5%	1.1%	7.4%	2.3%	2.7%



**New Horizons Regional Education Centers  
Preliminary Cost Allocation  
Year Ending June 30, 2018**

**Basis for Allocation**

	Basis	Newport News	Hampton	York Co	Wmsbg/JCC	Poquoson	Gloucester	Total
Special Education								
Autism	Projected FY 18 Enrollment	71	28	12	11	3	8	133
ED	Projected FY 18 Enrollment	36	23	6	10	-	5	80
ED/ID	Projected FY 18 Enrollment	15	7	4	3	1	3	33
								246
Career & Technical	Prior 3 year average enrollment	320.33	282.67	206.33	73.00	45.00	31.67	959
Governor's School	Prior 3 year average credits	83.33	133.33	241.00	116.33	59.33	21.00	654


**Allocation percentages**

	Basis	Newport News	Hampton	York Co	Wmsbg/JCC	Poquoson	Gloucester	Total
Special Education								
Autism	Projected FY 18 Enrollment	53.4%	21.1%	9.0%	8.3%	2.3%	6.0%	100.0%
ED	Projected FY 18 Enrollment	45.0%	28.8%	7.5%	12.5%	0.0%	6.3%	100.0%
ED/ID	Projected FY 18 Enrollment	45.5%	21.2%	12.1%	9.1%	3.0%	9.1%	100.0%
Career & Technical	Prior 3 year average enrollment	33.4%	29.5%	21.5%	7.6%	4.7%	3.3%	100.0%
Governor's School	Prior 3 year average credits	12.7%	20.4%	36.8%	17.8%	9.1%	3.2%	100.0%



January 24, 2017

TO: Members of the Board of Trustees and Superintendents

FROM: Joseph Johnson, Executive Director 

SUBJECT: **2017-42 CTE Master Plan and Timeline**

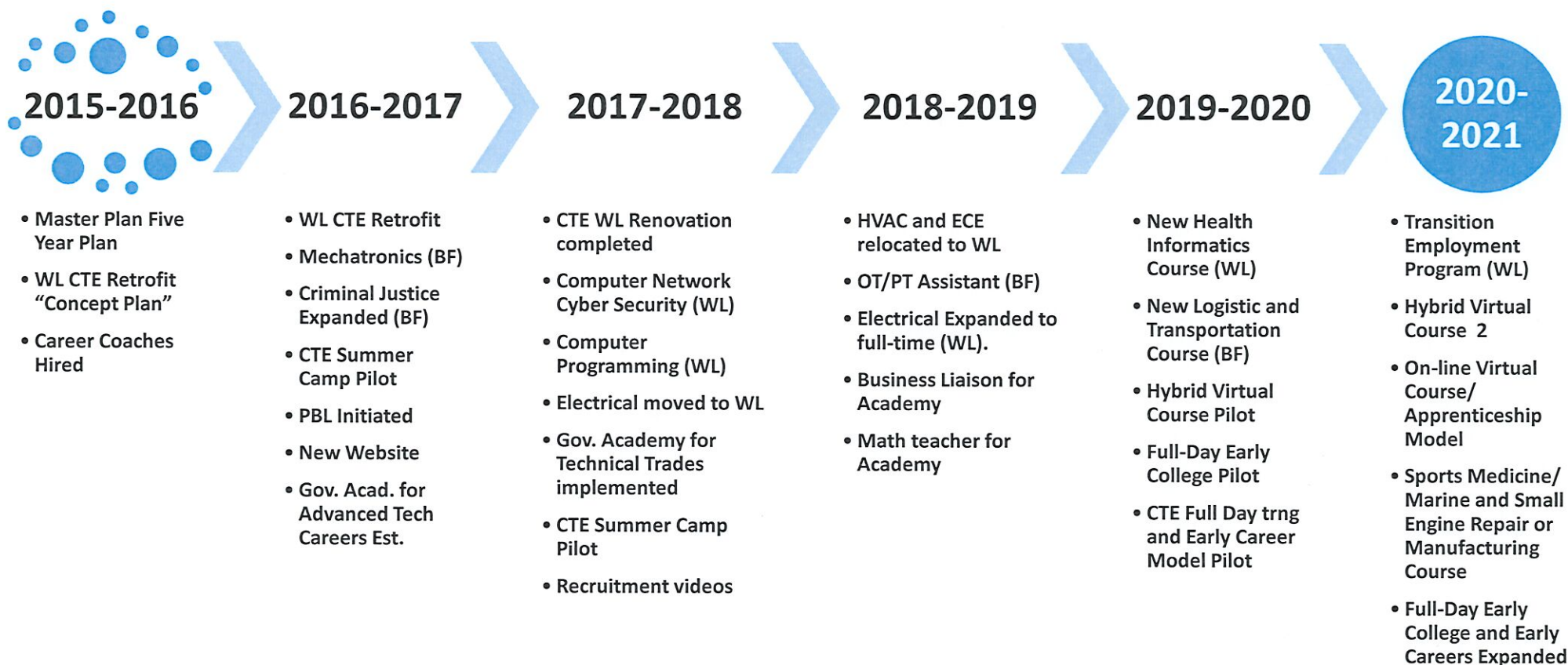
In 2015, NHREC contracted with Thomas P Miller Associates (TPMA) to develop a NHREC CTE Master Plan to include a special study done by Training Modernization Group (TMG) regarding a Manufacturing Training Strategic Plan. The consultants conducted a review of national and international research, local and state employment data, current program offerings, student achievement data, and conducted numerous focus groups with all constituents involved (students, parents, divisional staff, businesses, NHREC staff, etc.). A copy of the NHREC 2016-2021 Master Plan: Analysis and Recommendations is attached for your review. The recommendations were presented to the Board of Trustees in October of 2015.

Due to the scope and array of recommendations provided by TPMA and their impact upon staffing and financial resources priorities needed to be established. With guidance from the superintendents, the Executive Director met with each school division's representatives to discuss and prioritize recommendations related to Alignment of Program Offerings, and Instructional Delivery Models. This was followed by a regional planning session involving two to three key leaders from each division to review the divisional information and develop a finalized list of priorities and recommendations that was then finalized by the superintendents.

The CTE Master Plan key objectives, prioritized recommendations and updated Master Plan Timeline will be presented to the Board for discussion.

Attachments

# CTE Master Plan Timeline (draft 11/16)



New Horizons  
Regional Education Centers

# CTE Master Plan: Analysis and Recommendations

2016 - 2021

THOMAS P. MILLER & ASSOCIATES

PHASE 1



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Presented by:  
**THOMAS P. MILLER & ASSOCIATES**

Presented to:  
*New Horizons Regional Education Center*

August, 2015



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## Introduction

2015 marks the 50<sup>th</sup> anniversary of the establishment of the New Horizons Regional Education Center (NHREC) on the Virginia Peninsula. Today, almost 1,000 students are enrolled in the 21 Career and Technical Education (CTE) programs offered at the NHREC campuses at the Butler Farm facility in Hampton and Woodside Lane facility in Newport News.

The planned expansion of the Woodside Lane campus and half-century anniversary of NHREC provide an ideal opportunity for reflecting on what is working, what could be improved and what the future could hold. This Five Year CTE Master Plan – commissioned by the NHREC Board of Trustees and the superintendents of New Horizon’s six school divisions – was designed to do exactly that, to create a dialogue around a comprehensive NHREC CTE framework that can become a national model for a regional shared-time CTE center.

## Acknowledgements

Numerous parents, students, employers, CTE teachers, counselors, special education instructors, administrators, trustees, postsecondary representatives, politicians, community members and others generously gave of their time to attend focus groups, participate in interviews and answer surveys to make this planning process truly community-based and collaborative.

Special thanks to:

- All participants attending the NHREC Focus Group Meetings May 11 – May 15, 2015
- Bruce Schaffer, Principal, Woodside Lane Campus in Newport News
- Dewey Ray, Principal, Butler Farm Campus in Hampton
- NHREC Board of Trustee Members:
  - R. Page Minter – York County Public Schools
  - Charles Records – Gloucester County Public Schools
  - David Hux – Poquoson City Public Schools
  - Shelly Simonds – Newport News City Public Schools
  - Joe Kilgore – Hampton City Public Schools
  - Joseph Fuentes – Williamsburg/James City County Public Schools
- NHREC Area Superintendents:
  - Dr. Walter R. Clemons – Gloucester County Public Schools
  - Dr. Linda Shifflette – Hampton City Schools
  - Dr. Ashby C. Kilgore – Newport News City Public Schools
  - Dr. Jennifer Parish – Poquoson City Public Schools
  - Dr. Steven Constantino - Williamsburg/James City County Public Schools
  - Dr. Victor D. Shandor – York County Public Schools
- Interview participants:
  - Dr. John Dever, President, Thomas Nelson Community College
  - Mr. Michael Watson, CATLab

- 
- Mr. Michael Watson, CATLab
  - Mr. Bill Bell, Vice President, Human Resources Administration, Huntington Ingalls Industries Communications
  - Ms. Elizabeth Creamer, Advisory for Workforce Development Office of Secretary of Commerce and Trade
  - Ms. Lolita Hall, State CTE Director, Virginia Department of Education
  - Tom Cosgrove, Government Communications, Huntington Ingalls Industries dba Newport News Shipbuilding
  - Bill Docalovich, Tech Skills Development for Workforce and Manpower Planning, Huntington Ingalls Industries dba Newport News Shipbuilding

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## Executive Summary

Almost 1,000 students, from six school districts on the Virginia Peninsula, complete Career and Technical Education (CTE) programs in 20+ career areas at the Butler Farm and Woodside Lane campuses of the New Horizons Regional Education Center (NHREC).

In 2015, NHREC celebrates its 50<sup>th</sup> year of preparing students for work and postsecondary education. This milestone, and the planned expansion of the Woodside Lane campus, created an opportunity for the community to assess and reflect on the existing programs and structure of New Horizons and identify potential improvements. Through numerous interviews with stakeholders, five days of focus group meetings, analysis of labor market information, research on student performance, a review of national and international CTE models and intensive interviews and discussions with administrative leaders, this Five Year CTE Master Plan emerged.

The vision driving the creation of the Five Year CTE Master Plan is to:

*Make New Horizons Regional Education Center a **premier** workforce-centric training center for high school students and a **model** for the Commonwealth and the country*

Specific outcome metrics were identified to use as indicators of progress toward meeting the goals of the CTE Master Plan. The metrics, divided into those indicating satisfaction from employers and those for colleges and postsecondary institutions, include:

### Business/Industry Outcome Measures of Success:

- 85% of NHREC grads meet employer human resources entry/application requirements
- A higher % of employers hire and retain NHREC grads for at least one year
- 75% employer express satisfaction with the readiness of hired NHREC graduates
- Employers recognize a 50% reduction in OJT with NHREC grads
- 90% of NHREC grads earn an industry certification or credential valued by employers
- 100% of NHREC grads meet the VA work-readiness assessment requirements

### College/Postsecondary Outcome Measures of Success:

- 100% of college going graduates matriculate without needing remediation
- 60% of NHREC grads enter a career OR a postsecondary program related to their NHREC CTE program of study
- 85% of NHREC students earn eligible dual enrollment credits

Assessing the current situation at New Horizons finds that student performance – in terms of skills-development and post-high school placement of CTE students – is on par with state and federal CTE reporting requirements. In fact, New Horizons, places highest in student performance among Virginia's 10 regional technical centers.

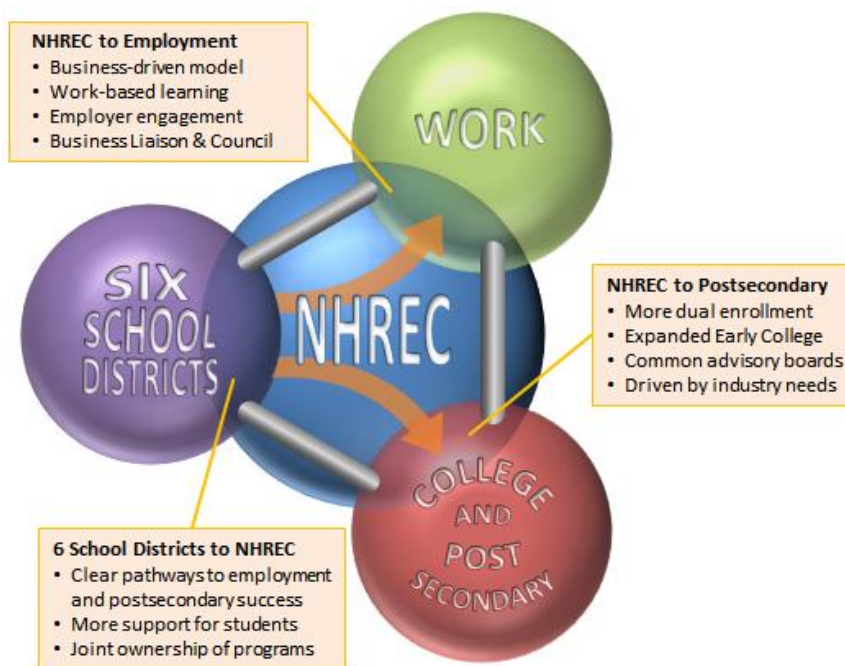


Despite NHREC's successes, numerous stakeholders provided suggestions of ways in which NHREC could be strengthened and improved. The recommendations form the foundation of the seven key objectives of the Five Year CTE Master Plan:

1. Implement an Employer-Driven CTE Model
2. Align NHREC Program Offerings to Regional High Wage and High Demand Business and Industry Needs
3. Retool CTE Instructional Delivery Models
4. Initiate Innovative, Evidence-Based Instruction
5. Enhance Student Support Services
6. Engage and Motivate Younger Students
7. Develop Marketing and Outreach Strategies

The innovative structural changes proposed for New Horizons revolve around enhancing and deepening the linkages between the six school divisions and NHREC with the highest demand needs of regional employers and those of area colleges and postsecondary institutions.

Though these connections already exist, the CTE Master Plan proposes specific actions to make employers the primary drivers of content within courses and the providers of hands-on work-based learning experiences that better prepare students for the workplace. Links must also be strengthened between NHREC's postsecondary partners and six school districts.



Phase 1 of this report outlines a broad framework of innovative and exciting changes proposed for the New Horizons Regional Education Center through the year 2021. Phase 2 details a specific action plan and timeline for turning the vision into a reality.

# I. ANALYSIS OF CURRENT STATE OF CTE

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When designing strategies for the future it is important to analyze what is currently in place. To assess the current state of CTE at New Horizons Regional Education Center, this report examined statistical data on student performance, listened to stakeholders attending multiple focus groups, reviewed labor market reports and data, and interviewed regional and state leaders with a broader perspective on New Horizons. Results of this analysis are summarized below, with more detailed information available in the appendices of this report.

## CTE Student Performance

Nearly 1,000 students are enrolled in CTE programs at New Horizons' two regional campuses and student performance results are mostly positive. NHREC CTE completers meet or exceed the targeted performance levels of the federal Perkins Act in the areas of student graduation rate, placement after high school and passage of technical skills assessments, including the four additional technical skills measures required by the state. The only state and federal target not met was at Butler Farm in the category of non-traditional student enrollment and completion, a category that measures the percentage of male students in traditionally female-oriented career classes and vice-versa.

Overall, New Horizons has ranked number one among all ten of Virginia's regional technical centers for three years in a row.

New Horizons collects additional student performance data, including the following:

- CTE student enrollment is at 99% of capacity, exceeding local goals
- 69.5% (2014-15 data) of first year NHREC students (mostly 11th graders) reenroll for the second year of a two-year program, though the goal is a 75% reenrollment rate. Auto Body Repair and EMT programs have the lowest return rates
- 92.3% of students earned an industry certification or credential in the 2013-14 school year. The rate was 100% in Veterinary Science and Cosmetology programs, the lowest rates were in Auto Body Repair and Pharmacy Technician programs though both programs improved to 100% in the 2014-15 school year
- Post-graduation surveys of NHREC graduates found:
  - 98% were satisfied or very satisfied with the preparation they received in their high school CTE program
  - 60% reported that their current job was not in a field related to their CTE program completed in high school
  - 73% reported transitioning to work or to post-secondary education

More details on CTE student performance at New Horizons Regional Education Center are summarized in Appendix A.

## Regional Labor Market Data and Employer Needs

As part of the NHREC Five Year CTE Master Plan, Thomas P. Miller and Associates reviewed and analyzed several key sources of regional labor market data for the Greater Peninsula region that highlight the employment needs of business and industry. These sources included:

- The Greater Peninsula Workforce Investment Board's *State of the Workforce* Report
- The Virginia Employment Commission
- Peninsula Council for Workforce Development's *Skills to Succeed Inventory* Manufacturing Study
- Greater Peninsula Healthcare Workforce Partnership's *Roadmap to Success in Healthcare* Report
- Weldon Cooper Center for Public Service

The Virginia Greater Peninsula, represented by the communities of Gloucester, Hampton, James City County, Newport News, Poquoson, Williamsburg and York County, encompasses a population of more than 480,000 and, like many communities, is just now recovering from the economic downturn of 2008. Data shows that while the region and state entered the recession at the same time and were equally affected, the Peninsula was slower to recover in terms of jobs growth when compared to the state.

Where year-to-year changes in statewide employment trends turned positive in the third quarter of 2010, that transition did not occur in the Greater Peninsula until the first quarter of 2012. Since then, however, year-over-year employment growth in the Peninsula has either met or exceeded statewide norms. For 2014, the Greater Peninsula Workforce Area's unemployment rate averaged 5.9%, a rate significantly less than the high of 7.8% unemployment reached in 2010.

In terms of employment by industry, the Greater Peninsula is dominated by manufacturing. Manufacturing is the region's largest employment sector and fifth highest paying sector, based on average weekly wages. Additionally, manufacturing employment within the region is a much higher percentage of total employment when compared to the state, underscoring the sector's significance. Retail trade is the next largest employment sector, followed by healthcare and social assistance, local government and accommodation and food services.

Industry	Employment
Manufacturing	31,413
Retail Trade	28,126
Healthcare	25,164
Local Government	24,781
Accommodation and Food Services	23,642

Source: Virginia Employment Commission, 4<sup>th</sup> Quarter, 2014

Figures for average weekly wages by industry also underscore the significance of these industries in total as well as the individual importance of manufacturing and healthcare to the region.

Industry	Avg Weekly Rate
Manufacturing	\$1,339
Retail Trade	\$460
Healthcare	\$896
Local Government	\$782
Accommodation and Food Service	\$329

Source: Virginia Employment Commission, 4<sup>th</sup> Quarter, 2014

Recently, a majority of manufacturing employers in the region were surveyed in a comprehensive analysis titled, *The Virginia Peninsula Career Pathways in Advanced and Precision Manufacturing Technologies Report*, produced by the Peninsula Council for Workforce Development, Thomas Nelson Community College and other workforce partners. From the surveys conducted for the report, employers stated that more than 11,000 manufacturing-related positions will be needed to meet demand in the near future. These fast-growing positions include operators in CNC and robotics, electricians, pipefitters, coating specialists, welders, repair technicians and many other positions.

In addition to these projections, the surveys found that 80% of current new hires were deficient in core skills needed for employment. The skill deficiencies noted most were in the areas of math, literacy, technical skills and work skills and represented barriers to employment and growth according to the employers.

Although estimated to grow by 10,000 new openings by 2018, the region's healthcare sector reflects many of the same deficiencies manufacturing does. The Greater Peninsula's Healthcare Workforce Partnership's *Roadmap to Success Allied Health Strategic Plan Survey* indicated that only 6.7% of healthcare employers were satisfied with the quantity and quality of applicants. Respondents indicated the top three workforce issues were quantity of qualified workers, turnover/retention of skilled employees and compensation issues. The study also showed there is a significant need for entry level training and education to provide a career pathway into upper level positions.

Approximately 40,000 Peninsula residents annually seek employment according to the report, while 50,000 are underemployed. Almost 50,000 workers in the region lack a high school diploma or GED and approximately 10,000 military veterans are anticipated to join the workforce.

These studies, recent data and occupational projections all indicate that the need for well-prepared applicants in the Peninsula region is poised to grow, and that concerted efforts may be needed to ensure the talent pipeline is functioning well to meet employer demand.

## State and Local Partner Perspectives

To better inform the New Horizons Regional Education Center's Five Year CTE Master Plan, interviews with state and local partners were conducted. For any strategic analysis, stakeholder perspectives provide invaluable, third party insights into current atmospheres. NHREC personnel identified seven key individuals to interview, encompassing multidimensional aspects of state educational leadership, private sector employers, legislative leaders and allied workforce partners. Those interviewed included:

- Dr. John Dever, President, Thomas Nelson Community College
- Bill Bell, VP, Human Resources and Administration, Huntington Ingalls Industries dba Newport News Shipbuilding
- Tom Cosgrove, Government Communications, Huntington Ingalls Industries dba Newport News Shipbuilding
- Bill Docalovich, Tech Skills Development for Workforce and Manpower Planning, Huntington Ingalls Industries dba Newport News Shipbuilding
- Michael Watson, President, CATLab, Former House Delegate
- Elizabeth Creamer, Advisor for Workforce Development, Secretary of Commerce and Trade, Office of Governor Terence R. McAuliffe
- Lolita Hall, State CTE Director, Virginia Department of Education

Numerous themes arose from the interviews ranging from optimism for the future to fear of potentially missing opportunities.

### Optimism and Available Resources:

All interviewees agreed NHREC is well positioned to thrive if it continues to take advantage of potential synergies between partners. Private industry representatives Tom Cosgrove and Bill Docalovich with Newport News Shipbuilding agreed all the pieces are in place for NHREC's continued success but it must strive to effectively utilize those pieces, such as more fully utilizing the close proximity of the Shipbuilder's Apprenticeship School and Thomas Nelson Community College.

### Employer Engagement and Governance:

Making a more concerted effort to engage employers was a dominant theme across all interviews with the majority agreeing the momentum to do so appears to be increasing. Employer representatives believe NHREC must utilize employer representatives more and instilling an overall employer's philosophy. But opinions were mixed about which responsibilities fall to employers and which stay with educators. Regardless of philosophies, all agreed employers must have more of an influence on programmatic, curriculum and certification decisions.

*"Very few areas I know of have such a regional infrastructure as represented by NHREC's six school systems, plus the Thomas Nelson Community College, our employer base and other resources. I feel all these assets are primed to work together to provide the workforce of the future for our area."*

- Dr. John Dever, President  
Thomas Nelson Community College



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### **Skills and Program Offerings:**

Respondents conveyed concerns surrounding individual skills and program offerings. Tom Cosgrove and Bill Docalovich with Newport News Shipbuilding and Michael Watson, former Virginia House Delegate and CEO of CatLab, all mentioned the lack of soft skills for workers as problematic. Skills such as employees reporting to work on time, being prepared and understanding acceptable procedures and actions in the workplace were all referenced.

In addition to soft skills, all three interviewees mentioned specific applied skill deficiencies they currently witness within their own businesses and industries. These included math skills, ranging from basic math to geometry. Spatial relations and mechanical aptitude skills were also stressed as deficient. Respondents stated considerations should be given to programs such as field machinists/millwrights, electrical and other construction fields, healthcare and marine services in addition to an increase in welding programs.

### **CTE Viewpoints and Perceptions**

Many felt more efforts were needed to inform students and parents of the opportunities provided through career and technical education (CTE). Misperceptions about CTE still persist. Efforts should be made to highlight the high paying careers and low debt levels of NHREC graduates compared to college bound students and schools counselors and other school personnel at the six school districts need to be better informed on these issues.

### **Apprenticeship and Other Learn and Earn Opportunities**

Providing more apprenticeships and other work and learn opportunities was a frequent comment by interviewees. More opportunities with local area employers are needed to expose students to true work experiences. Mike Watson of CatLab suggests mandating internships for all NHREC students stating, “What more efficient and effective model is there than for these students to get out and learn while on the job?”

### **Additional Comments**

While those interviewed all had individual ideas, common additional comments representing themes included:

- *“New Horizons must serve the needs of their economic region.”*
- *“All the schools must emphasize not duplicating efforts. Working regionally, more will be accomplished.”*
- *“While employers must have more of a voice, they must also realize they need to make more of an investment as well. The product (students) will be their workforce of the future. Investment in terms of money, equipment, facilities, etc.”*
- *“As a region, we are well equipped with assets. We just need to better, more effectively utilize those assets. Employers, the school systems, New Horizons, the Community College, we all need to ensure we are efficient working together as efficiently as possible and align pathways to ensure we are preparing the workforce of the future for the peninsula.”*

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## Stakeholder Focus Group Meetings

Over a period of five days in mid-May 2015, more than 50 parents, students, business representatives, teachers, counselors, administrators and others participated in a series of stakeholder meetings to share successes and challenges with the programs at New Horizons. Key themes from the focus group meetings – summarized below - were used to develop the CTE Master Plan Goals detailed in Section III.

- ***Improve connections & engagement with regional employers***
  - Identify employers needs for NHREC graduates on the peninsula
  - Engage employers more actively in curriculum development and review
  - Revamp and improve CTE Advisory Committees
  - Consider hiring a work-based learning coordinator/business liaison
- ***Examine new CTE program delivery models***
  - Look at full day models or other models that use technology
  - Consider NHREC as a “linking role” or the facilitating group not just a facility
- ***Develop proactive strategies for marketing NHREC programs***
  - Improve communication and marketing of NHREC
  - Let Business/Industry promote/market New Horizons and bigger CTE concept
- ***Expand dual credit/dual enrollment opportunities***
  - Expand the number of programs offering dual credit/dual enrollment
  - Link better to nearby community colleges
  - Utilize college instructors for more college level courses and dual credits
- ***Improve supports for NHREC students***
  - Provide academic support services for students attending NHREC programs
  - Expand support for students with disabilities
  - Improve guidance and counseling services for students
  - Consider a coordinator for graduate survey and work-based learning
  - Utilize community college career coaches
- ***Engage younger students***
  - Develop strategies for engaging students prior to 11<sup>th</sup> and 12<sup>th</sup> grades
  - Consider changes to process for applying and accepting applicants to NHREC
  - Improve sophomore presentations regarding NHREC
- ***Consider new CTE programs at NHREC***
  - Develop a system for deciding what programs should be added and/or revised
  - Base any program changes on labor market data
- ***Address other challenges***
  - See what can be done to improve transportation issues
  - Upgrade equipment including technology equipment and bandwidth
  - Find new teachers to fill opening or projected openings
  - Proactively address age limitations/liability issues for work-based learning

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## II. CTE MODELS OF INNOVATIVE PRACTICES

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Quality planning not only involves analyzing the current situation but also envisioning the future and “what could be.” New Horizon’s Vision and Mission drive the planning process forward while the priority outcomes provide specific targets for the action plan. Components of model CTE programs are also included in this section to provide a basis for comparing the current situation to where NHREC hopes to be in the future.

### Vision and Mission

The New Horizons Regional Education Center vision is to *“strive to become a state-of-the-art regional education center nationally recognized as an authority on specialized educational programs and services that support the development of a world-class workforce and a self-sufficient citizenry.”*

The vision for the Five Year CTE Master Plan is more concise:

*Make New Horizons Regional Education Center a **premier** workforce-centric training center for high school students and a **model** for the Commonwealth and the country*

The NHREC mission is *“To serve the educational needs of the Peninsula’s school divisions, New Horizons will prepare students educationally, technically, and socially, according to each student’s needs, to become productive citizens.”* Specifically, the NHREC mission seeks:

- To train and educate a world-class workforce
- To challenge and enrich the education of future scientists and mathematicians
- To provide effective educational, vocational, and therapeutic day treatment for children and youth with disabilities.

### Identification of Priority Outcomes

Desired outcomes reflect the “ultimate goals” of an effective Career and Technical Education program at NHREC. By identifying the priority outcomes wanted from the Five Year CTE Master Plan, decision-makers can focus on specific strategies that will have the greatest potential for impacting desired results.

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Outcome measures are divided into two categories, reflecting the student outcomes wanted by NHREC's primary customers, 1) business and industry, and 2) college and postsecondary education and training institutions which prepare students for work.

#### **Business/Industry Outcome Measures of Success:**

- *85% of NHREC grads meet employer human resources entry/application requirements*
- *A higher % of employers hire and retain NHREC grads for at least one year*
- *75% employer express satisfaction with the readiness of hired NHREC graduates*
- *Employers recognize a 50% reduction in OJT with NHREC grads*
- *90% of NHREC grads earn an industry certification or credential valued by employers*
- *100% of NHREC grads meet the VA work-readiness assessment requirements*

#### **College/Postsecondary Outcome Measures of Success:**

- *100% of college going graduates matriculate without needing remediation*
- *60% of NHREC grads enter a career OR a postsecondary program related to their NHREC CTE program of study*
- *75% of NHREC graduates who matriculate to college earn a degree or a credential*

## **CTE Model Program Components**

The recommendations, goals, and strategies that comprise New Horizon's Five Year CTE Master Plan must not only address the current and expected needs of the regions employers and postsecondary institutions, they should also advance NHREC's vision to be a model workforce-centric training center for the state and the country.

To compare current conditions at New Horizons with "what could be," this study conducted a comprehensive national and international review of high quality Career and Technical Education (CTE) programs and best practices from programs within and outside of the United States. The research points to twelve components that comprise the very best CTE programs and systems. These components include:

1. **Rigorous academic preparation** that allows students to successfully transition to postsecondary education by recognizing that CTE students are readying for a variety of careers requiring various levels of academic preparedness
2. **Employer-driven technical skill development** that leads to an industry certification, license or credential valued by employers and by postsecondary education and training programs
3. **Employability skills or "soft skills" education** to ensure that students have a strong work ethic and other employability skills that allow them to get hired and stay hired

4. **Work-based learning experiences** – the more, the better – in which students engage in “real world” applied learning at actual jobsites with employers and typically include internships, pre-apprenticeships, cooperative education and other work and learn types of experiences
5. **Opportunities to earn college credits or an industry certification, license or credential** valued by employers before graduation
6. **Pathway sequences** of required and elective high school courses that help students explore, engage and learn specialized skills in a career, industry sector or career cluster area. Quality pathways:
  - Are clear and easy for students to understand showing the courses students need - from high school to postsecondary training to the workforce - in career area(s) of interest
  - Are driven by regional and state employer needs in high wage and high demand occupations and are actively created, reviewed and revised with robust employer involvement
  - Intentionally focus on student engagement, offering career cluster awareness and exploration at the elementary and middle school levels with gradual advancement in high school preparation, planning and work-based learning
  - Sometimes narrow student options so they can focus and not be overwhelmed
  - Allow multiple entry and exit points so students have flexibility to move between pathways
7. **Student supports** that include academic, career and personal guidance to help students prepare, plan and successfully link their secondary experiences to future plans
8. **Instructor supports** for learning and using new and innovative teaching strategies, effectively using technology and other professional development on ways to improve student learning
9. **Financial supports** to adequately fund teacher salaries, equipment purchases, equipment and facility maintenance, curricular materials and technology
10. **Leadership** that articulates, directs and supports a coordinated CTE vision that guides how all of the various partners and systems work together
11. **Action plans** that clearly detail the most effective and efficient steps required to implement, regularly review and update programs and processes
12. **Data-based accountability** that assesses progress toward meeting targeted student performance, employer satisfaction and postsecondary program outcomes. Effective accountability systems:
  - Provide meaningful incentives for progress
  - Incorporate a regular review processes to make data-based decisions
  - Move nimbly and quickly to make adjustments when changes are needed

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- Allow and encourage flexibility within the infrastructure to accommodate innovation

## National and International CTE Models

Ten well-respected national and international CTE models are summarized in Appendix B which also includes a listing of several innovative model features.

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### III. ALIGNMENT AND ACTION

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#### Recommendations

Based on stakeholder interviews, focus group input, employer surveys and student performance data gathered for this study summarized in Section I and ideas drawn from the CTE models and exemplary CTE model components described in Section II, the following recommendations have been developed for the NHREC Five Year CTE Master Plan:

- 1. Implement an Employer-Driven CTE Model**
- 2. Align NHREC Program Offerings to Regional High Wage and High Demand Business and Industry Needs**
- 3. Retool CTE Instructional Delivery Models to Meet the Needs of Students, Employers and Schools**
- 4. Initiate Innovative, Evidence-Based Instruction**
- 5. Enhance Student Support Services**
- 6. Engage and Motivate Younger Students**
- 7. Develop Marketing and Outreach Strategies**

On the following pages, goals and specific strategies are listed for each recommendation in order to form a foundation for the Five Year CTE Master Plan.

In Phase 2 of this report, a Strategic Action Plan and Implementation Timeline will provide further details of the specific tasks that must be completed to achieve the objectives and goals summarized in the following pages.



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### ***Objective 1: Implement an Employer-Driven CTE Model***

- Goal 1a. Identify and align NHREC program offerings to employment needs in the area
- Goal 1b. Research, select, and implement business engagement and oversight models that reflect the needs of employers in each career sector
- Goal 1c. Revamp and improve overall employer engagement in CTE program management
- Goal 1d. Create Business Liaison and Work-Based Learning Coordinator positions
- Goal 1e. Enhance apprenticeship and other work-based learning opportunities for students

### ***Objective 2: Align NHREC Program Offerings to Regional High Wage and High Demand Business and Industry Needs***

- Goal 2a. Develop and implement a plan for the expansion of Woodside Lane campus and course alignment at each campus
- Goal 2b. Develop a framework and process for analyzing and determining CTE program offerings, capacity, and campus location
- Goal 2c. Explore additions and revisions to existing CTE program offerings to fit industry needs
- Goal 2d. Replace, upgrade, and align equipment and technology to industry standards

### ***Objective 3: Retool CTE Instructional Delivery Models to Meet the Needs of Students, Employers, and Schools***

- Goal 3a. Research, evaluate, and implement new, innovative CTE delivery model(s)

### ***Objective 4: Initiate Innovative, Evidence-Based Instruction***

- Goal 4a. Examine the gaps between the content of existing CTE programs and employer job descriptions and human resource assessments used in hiring
- Goal 4b. Expand offering of industry certifications, licenses, and other credentials
- Goal 4c. Provide teacher professional development on innovative and effective national and international teaching and learning strategies
- Goal 4d. Create processes allowing employers to regularly update teachers on industry trends
- Goal 4e. Develop plan to recruit new teachers to fill projected openings
- Goal 4f. Significantly increase dual credit/dual enrollment opportunities
- Goal 4g. Create an intentional employability skills initiative

### ***Objective 5: Enhance Student Support Services***

- Goal 5a. Create academic/instructional supports for NHREC students
- Goal 5b. Link and improve academic and career counseling supports
- Goal 5c. Initiate targeted support for students with disabilities
- Goal 5d. Create technology instructional support positions
- Goal 5e. Design intentional strategies to address specific program delivery challenges

### ***Objective 6: Engage and Motivate Younger Students***

- Goal 6a. Develop strategies for engaging students in elementary and middle schools
- Goal 6b. Implement plan for motivating students to enroll in programs

### ***Objective 7: Develop Marketing and Outreach Strategies***

- Goal 7a. Create strategies to improve marketing of employment opportunities through NHREC programs
- Goal 7b. Advocate for changes that support programs leading to student success

## ***Objective 1: Implement an Employer-Driven CTE Model***

Traditional technical education models start from an educator's perspective, with occasional input from employers serving on advisory committees. The new employer-driven CTE model actively engages employers in developing, regularly reviewing, and proactively linking secondary education to the realistic needs of the employment sectors that drive the regional economy

### **Goal 1a**

Identify and align NHREC program offerings to employment needs in the area served by NHREC and its schools

- Pinpoint regional employer demand and projected demand for high school graduates, community college graduates, and those earning certificates or certifications in mid- to high-wage occupations from each of the career clusters
- Use employer partners, local WIB(s), Chamber of Commerce, Peninsula Council for Workforce Development and local economic development to examine labor market information data to determine workforce needs in current and emerging career areas in the region and in the state of Virginia
- Actively engage employers and human resource managers in identifying entry level employment skill levels needed, degrees or credentials required for various positions, and what assessment instruments and/or processes are used in hiring

### **Goal 1b**

Research, select, and implement business engagement and oversight models that reflect the needs of employers in each career sector

- Design a Public/Private Non-Profit program management structure and process as identified in the Manufacturing Sector Master Plan
- Replace the current CTE program advisory committees with Sector Advisory Committees driven by business/industry stakeholders from the region, from within an industry cluster or sector, who are actively engaged in developing and reviewing the curriculum, training components, work-based learning, assessments, and other instructional components

- 
- Develop a Business Council, comprised of business and industry leaders from across multiple sectors, to oversee all NHREC career clusters work, CTE program and course offerings, work-based learning, student recruitment and marketing

### **Goal 1c**

Revamp and improve overall employer engagement

- Implement a model for employer recruitment (including a more direct “ask” of employers), selection, employment, training, and retention as outlined in the Manufacturing Sector Plan
- Overlay regional employer recruiting and hiring processes onto NHREC programs
- Actively involve employers in assessing student skills through skills demonstration in addition to credentialing and licensing exams
- Engage employers more intentionally in work-based learning, job fairs, etc.
- Create an annual regional employer survey to assess how well NHREC is involving employers, aligning CTE programs and content to workforce expectations, and overall employer satisfaction with student preparation

### **Goal 1d**

Create Business Liaison and Work-Based Learning Coordinator positions

- Business Liaison would reach out and coordinate with multiple employers in each career sector to pinpoint employer/employment opportunities and skill needs, assess current and projected occupational openings in the region, find employers willing to engage with and/or hire high school students, and create direct links with employer HR departments doing recruitment, selection, interviewing, assessments, and hiring
- Work-Based Learning Coordinator would coordinate all apprenticeship and work-based learning programs, create and oversee school-year and summer internships, assist in the interviewing and selection process of students with identified businesses, and provide transition assistance to students and businesses during first year of retention

### **Goal 1e**

Enhance apprenticeship and other work-based learning opportunities for students

- Proactively link student apprenticeship opportunities with the economic drivers of the region (including the shipbuilders apprenticeship program)
- Develop sequential student preparation processes for work-based learning

## ***Objective 2: Align NHREC Program Offerings to Regional High Wage and High Demand Business and Industry Needs***

An employer-driven technical education model must offer courses and programs that closely align to the regional and state needs of business and industry. Doing so directly benefits students as well as the regional economy

### **Goal 2a**

Develop and implement a plan for the expansion of Woodside Lane campus and course alignment at each campus

- A specific action plan will be detailed in Phase 2 of this report

### **Goal 2b**

Develop a framework and process for analyzing and determining CTE program offerings, capacity, and campus location

- Create a set of criteria and an annual process to review and determine which CTE programs should be added, expanded, modified, deleted or realigned between campuses to ensure that alignment at each campus would be based upon employment demand, divisional offerings, and transportation needs. Program changes would be based on workforce data, program enrollment and performance data, and successful transition into related area of training
- Involve local partners to vet any proposed new programs

### **Goal 2c**

Explore additions and revisions to existing CTE program offerings to better fit industry needs

### **Goal 2d**

Replace, upgrade, and align equipment and technology to industry standards

- Utilize Business Council and Sector Advisory Committees to identify and suggest equipment and technology changes and updates based on industry standards
- Create an equipment purchase, replacement, and repair plan for each campus

## ***Objective 3: Retool CTE Instructional Delivery Models to Meet the Needs of Students, Employers, and Schools***

Many new models of delivering career and technical education programs have been explored in the development of this Master Plan, and continual reviewing and rethinking of best program delivery models will continue as the economy and employer needs change over time. The proposed models enhance New Horizon's role from being just a facility-based CTE provider to a facilitator of services to fulfill a multitude of needs across all six school systems.

### **Goal 3a**

Research, evaluate, and implement new, innovative CTE delivery model(s). Possibilities include:

- A "Governor's STEM Academy for Advanced Industries" and/or a "Governor's STEM Academy for the Trades" (Advanced Manufacturing, Construction, Automotive)
  - Redefining the existing Greater Peninsula Governor's STEM Academy facilitated by NHREC
- A Full Day CTE and Early College Model with Thomas Nelson Community College
  - Offering additional opportunities for students to earn college credits toward a technical certificate or an Associate's Degree while in high school
- A Full Day CTE and Virtual or Distance Learning Model
  - NHREC uses an array of technology-based learning models – such as distance learning or flipped classrooms – allowing students to learn through a combination of computer-based and in-person labs at NHREC campuses
- A Full Day CTE and Early Careers Model
  - Offering a half-day technical training model combined with half-day work-based learning experiences for seniors meeting high school graduation requirements
- A Half Day CTE and Division School Model
  - The existing model in Virginia since the 1970's
- A Facilitated Services Model
  - NHREC is the facilitator of multiple programs or services for the six school divisions such as Early College, Early Careers, dual enrollment, employer coordination for work-based learning, professional development, and best practices
- A Transition Services Training, Employment, and Support Model
  - Enhance offerings for students requiring additional support services or basic skills training
- A Student-Led Enterprise Model

## Current Model

- Education-driven
- Focused on CTE content
- Centered mostly around 2 campuses



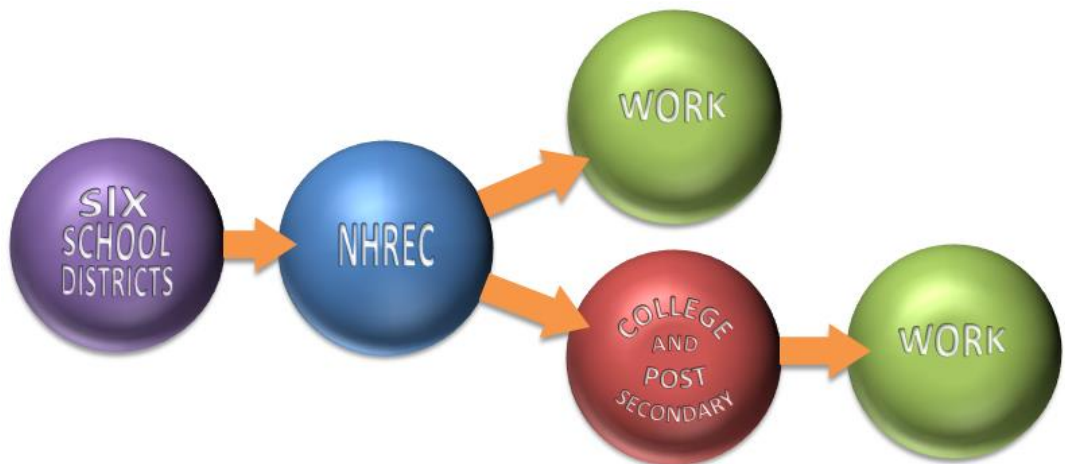
## New Model

- Employer-driven
- Focused on multiple models
- Central coordinator of services for 6 school divisions plus 2 campuses

This goal propels NHREC forward from the current state of being two facilities providing specific CTE content and instruction, to a model where NHREC aligns and connects multiple services and programs – meeting diverse needs of students, schools, employers and postsecondary partners – through its current facilities via virtual instruction and creative scheduling.

## Current Model

New Horizons currently operates as a linear model, preparing students from each of the six school divisions for work or college and postsecondary education directly after graduation.



Educational services are separate and specific to school buildings. Links to work and to postsecondary education programs exist but the requirements of employers and colleges are minimally embedded into the NHREC curriculum.

Through discussions stemming from the strategic planning process, leaders and stakeholders began picturing the possibility of different roles for NHREC.

Under a new model, New Horizons could operate as central hub for multiple programs – including CTE – but also for facilitating dual enrollment programs and Early College models, coordinating with businesses for work-based learning across the six school divisions, and even providing professional development for CTE teachers and school counselors.

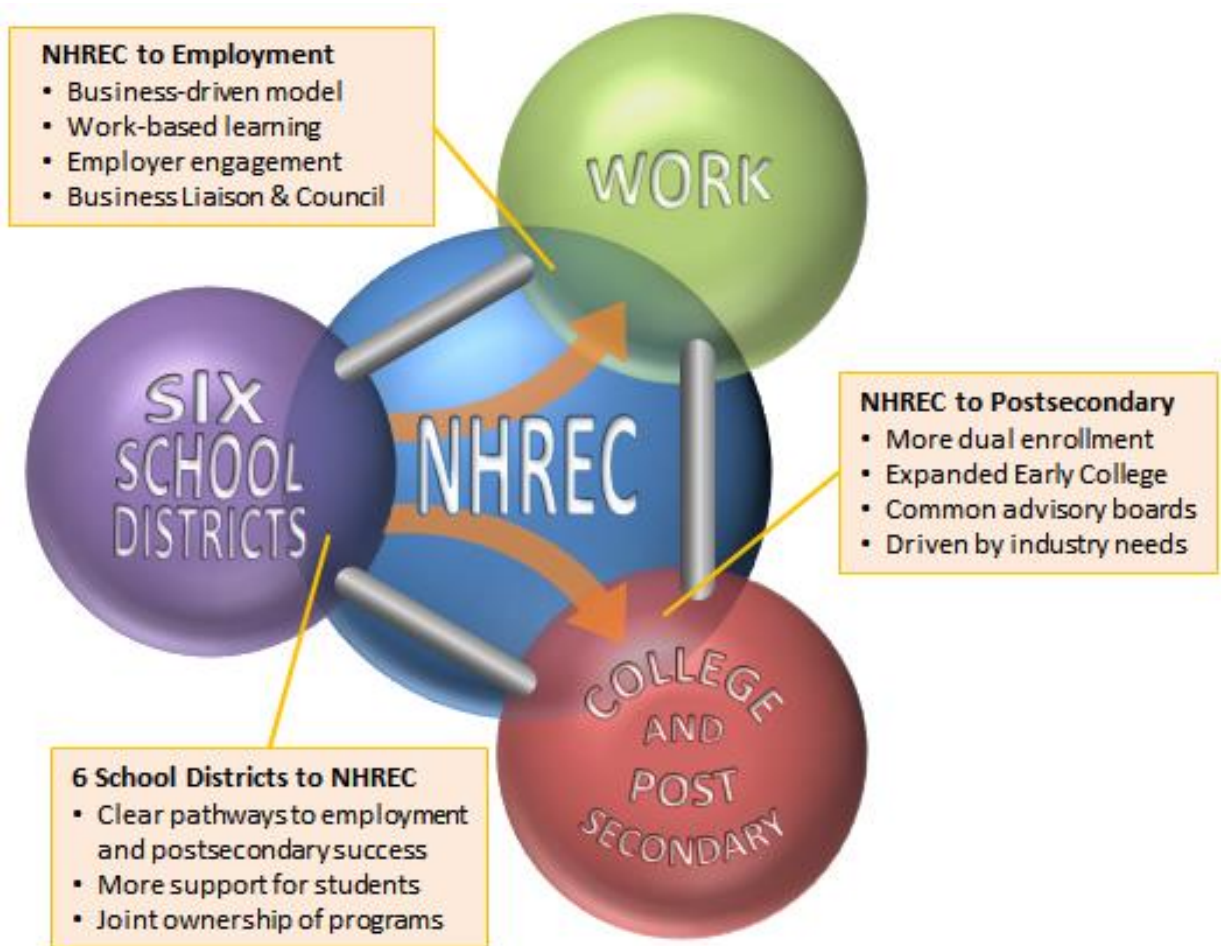


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## New Model

A new NHREC model creates stronger and closer links between school divisions, employers and postsecondary education and training providers.

It provides more support and flexibility to schools, and to students, while allowing for a variety of instructional learning methodologies to better connect to students to workforce and postsecondary needs.





## ***Objective 4: Initiate Innovative, Evidence-Based Instruction***

Improving the alignment of CTE course content to workforce needs using innovative, evidence-based teaching strategies will improve instruction and lead to better outcomes for students

### **Goal 4a**

Examine the gaps between the content of existing CTE programs, employer job descriptions and human resource assessments used in hiring

- Examine and edit course descriptions and content to align with employer requirements
- Create clear employer-driven course and program prerequisites

### **Goal 4b**

Expand offering of industry certifications, licenses, and other credentials valued by regional and state employers

- Connect to Governor's *Credentials to Compete* program
- Utilize Sector Advisory Committees to review, recommend and identify (where needed) most appropriate certifications and credentials students should earn
- Implement Virginia's Workplace Readiness credential for all students

### **Goal 4c**

Provide teacher professional development on innovative and effective national and international teaching and learning strategies

- Develop a plan for offering professional development to NHREC teachers that includes Project-Based Learning, Team Teaching Strategies, integration and use of technology, integrating academics into curriculum, and sharing of resources and facilities
- Create a teacher team to research, select and provide additional professional development training in the latest innovative and most effective national and international teaching and learning strategies
- Implement a process with dedicated time for teachers to develop consistency among/across curriculum frameworks, standards, lesson plans and syllabi through curriculum mapping and other techniques

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### **Goal 4d**

Create processes allowing employers to regularly update teachers on new trends in the industry

- Develop a plan for connecting CTE instructors – plus teachers and counselors from the six school divisions – to regional industries on a regular basis for updates on the latest trends, technology, and methods used by employers
- Initiate a summer teacher internship program with area employers

### **Goal 4e**

Develop plan to recruit new teachers to fill projected openings

### **Goal 4f**

Significantly increase dual credit/dual enrollment opportunities

- Expand the number of CTE programs offering dual credit/dual enrollment
- Improve links to nearby post-secondary programs such as TNCC, ECPI, The Apprenticeship School, NHREC Apprenticeship and Adult Training, Culinary Institute of Virginia, etc.
- Create common advisory committees between Secondary and Postsecondary as appropriate within career sectors
- Research option of utilizing community college instructors from TNCC or other institutions to increase efficiency and reduce redundancy
- Identify and utilize appropriate academic assessments for college readiness

### **Goal 4g**

Create an intentional employability skills initiative

- Implement the Virginia Employment Readiness credential for all students
- Create a coordinated instructional delivery system at each campus for employability skills instruction through a virtual curriculum, a unified curriculum for each course and instructor, or a curriculum divided among teachers with dedicated instructional time for students that rotate through the curriculum during the year

## ***Objective 5: Enhance Student Support Services***

Teachers, parents, and students in focus groups expressed the need for increased academic help, career and academic counseling services, accommodations, and other types of support. The following goals are designed to address these needs

### **Goal 5a**

Create academic/instructional supports for NHREC students

- Create an academic support team (math and English) at each campus to provide academic support services for students experiencing difficulties with work at New Horizons or at their comprehensive high school
- Integrate academic rigor, mathematics and English/language arts (especially), within technical skills instruction

### **Goal 5b**

Link and improve academic and career counseling supports

- Provide targeted professional development to counselors at each high school
- Utilize Career Coaches to assist with career and college readiness efforts
- Connect business/work-based learning liaison and Career Coaches with school counselors in each district
- Establish a structure for regularly engaging divisional school counselors and CTE directors in the oversight, buy-in, and support of NHREC programs
- Develop an orientation process for new school counselors about NHREC

### **Goal 5c**

Initiate targeted support for students with disabilities

- Implement a process of obtaining student IEP accommodations and link these accommodations to IEP student case managers
- Provide in-class and academic support for students with special needs

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### **Goal 5d**

Create instructional technology support positions

- Employ a “tech teacher of teachers” to provide technology training and support to teachers and to integrate technology into curriculum and instruction at each campus
- Provide assistance to teachers in the development and provision of web-based learning
- Coordinate online, virtual instructional options

### **Goal 5e**

Design intentional strategies to address issues related to transportation, course pre-requisite consistency, flexibility in pathway choices, liability issues related to work-based learning and post graduate surveys

## ***Objective 6: Engage and Motivate Younger Students***

To ensure students enroll in and complete career and technical education programs aligned to high wage, high demand occupations in a region, students must become aware of and be engaged in exploring a variety of career clusters and occupations at the earliest grade levels

### **Goal 6a**

Develop strategies for engaging students in elementary and middle schools

- Create new career cluster awareness, exploratory, and engagement opportunities for students in earlier grades
- Develop perception-changing awareness strategies for parents
- Streamline the student application and acceptance process, including development of an online option, and an incoming student assessment or interview process
- Improve NHREC sophomore and junior recruitment activities

### **Goal 6b**

Develop and implement a plan for motivating students to enroll in programs leading to high demand/high wage occupations

## ***Objective 7: Develop Marketing and Outreach Strategies***

A critical component of the Five Year CTE Master Plan is establishing marketing plans to create awareness and foster appreciation of NHREC courses and programs

### **Goal 7a**

Create strategies to improve marketing of employment opportunities through NHREC programs

- Consider name change from *Career and Technical Education Centers* to possibly *Career Centers* or *Academies* or *Center for Advanced Science and Technology*, etc. Could also have same or different name for each Technical Center
- Develop a marketing strategy utilizing businesses to promote the job opportunities, wages, and careers available to students through training at NHREC
- Develop plans to improve parent and student perceptions
- Enhance ownership and support of NHREC by the six school divisions including the marketing of NHREC on school websites as one of the divisional schools or as an educational option
- Market NHREC as the place where students of ALL ability levels prepare for success
- Engage business/industry champions to promote employer links to New Horizons
- Design a new, more interactive web-site and engage the use of social media

### **Goal 7b**

Advocate for changes that support programs leading to student success

- Proactively approach legislature to address multiple issues including liability concerns of employers related to Youth Apprenticeship and work based learning
- Research using the “Board Legislative Position” for legislative advocacy
- Enlist NHREC “Legislative Champions” to increase awareness and increase influence around legislative issues
- Address state’s “Completer” definition within career clusters and among clusters
- Address teacher licensing issues (such as for teaching Construction Trades)

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## Appendix A

### NHREC CTE Student Completer Performance Data

Close to 1,000 students, primarily 11<sup>th</sup> and 12<sup>th</sup> graders, are enrolled in CTE programs at the New Horizons Regional Education Centers at the Butler Farm Campus in Hampton and Woodside Lane Campus in Newport News. Students spend two hours and twenty minutes in classes at the two campuses, either in the morning or afternoon, and receive the rest of their academic instruction from their home high school. Students from six school systems and 18 high schools and 7 Alternative Learning Centers may apply for enrollment in 22 CTE programs offered at New Horizon's two campuses, including 10 two year programs and 7 programs that offer college credits:

- Auto Body Prep
- Auto Body Repair I & II
- Automotive Technician I & II (17 college credits)
- Barbering I & II
- Carpentry I & II
- Computer Systems Technology (3 college credits)
- Cosmetology I & II
- Criminal Justice (6 college credits)
- Culinary Arts
- Dental Assistant I & II
- Early Childhood Education I & II (6 college credits)
- Electricity and Renewable Energy
- Emergency Medical Technician (EMT) I & II (9 college credits)
- Fire Fighter (6 college credits)
- Heating, Ventilation, Air-Conditioning & Refrigeration (HVAC) I & II (9 college credits)
- Dental Assistant I & II
- Introduction to Electronics & Robotics/Advanced Robotics & Fiber Optics
- Medical Assistant
- Nursing Assistant
- Pharmacy Technician
- Veterinary Science
- Welding I & II

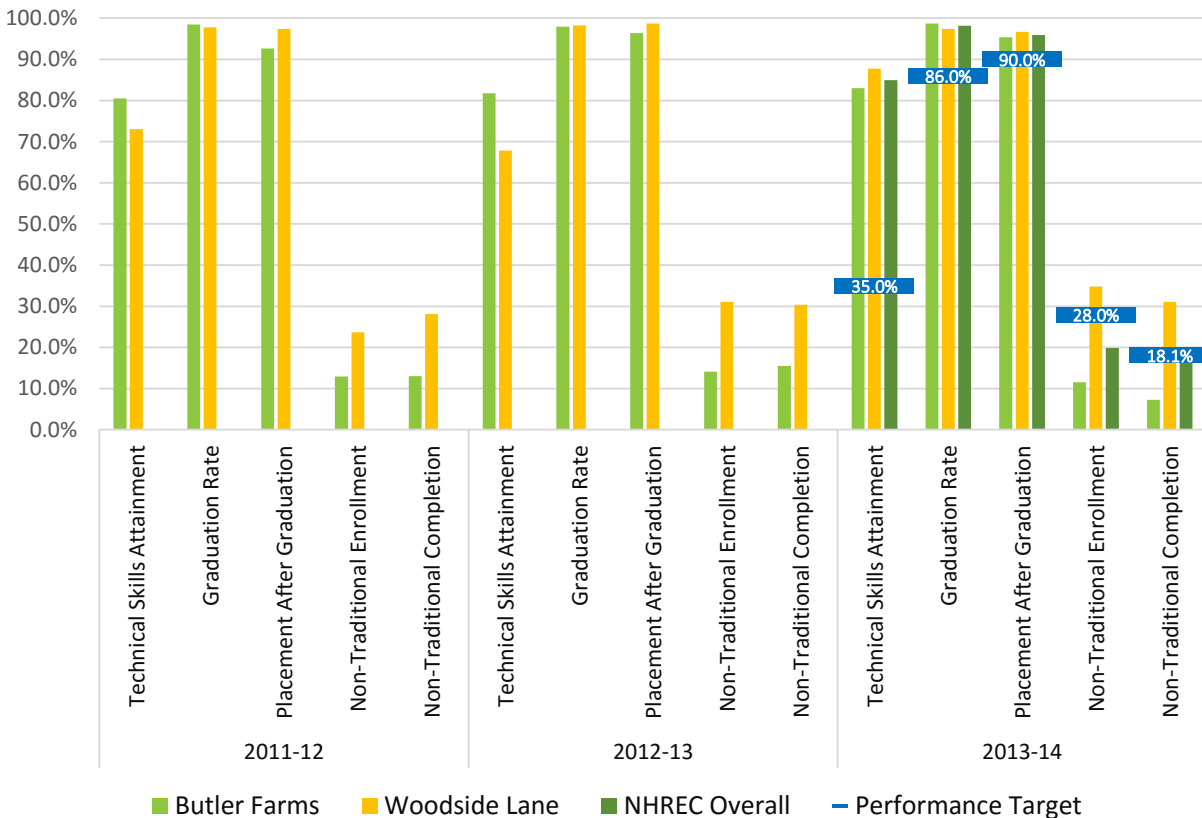
Just over half of all New Horizon's students are enrolled in a two year program. The Auto Body Repair course is specifically oriented to serve students lower academic ability.

To conform to the requirements of the federal Carl D. Perkins Act, eight CTE student performance targets are established and reviewed each year. Figure 1 on the next page summarizes student performance data from the last three years in graphical form with the Perkins performance targets indicated in blue on the bar graph for the 2013-14 school year.



Students at New Horizons' Woodside Lane and Butler Farm campuses consistently perform above the targeted performance levels in the areas of technical skills attainment, graduation rate and placement after high school. This is true for all students including those who have special needs.

Figure I. NHREC Perkins CTE Student Performance



Results were mixed in the last two performance areas, non-traditional student enrollment and non-traditional student completion (2013-14 data). These targets were met at the Woodside Lane campus but not at Butler Farm with enrollment percentages in these categories less than half of state expectations. Non-traditional performance targets measure the percentage of male students in traditionally female-dominated career courses (such as cosmetology) and females enrolled in traditionally male-dominated career courses (such as welding). The two campuses are not held accountable for CTE student math and English performance targets because academic instruction is not offered at the two campuses.

It should be noted that New Horizons averages the highest ranking for overall CTE student performance when compared to the other 9 regional technical centers in Virginia, a ranking it has held for at least the last three years.

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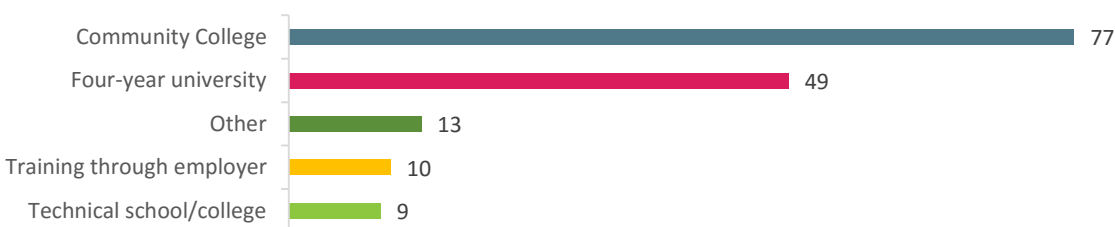
A New Horizons School Improvement Plan, outlining three CTE goals to measure and improve student performance, showed promising results in the 2014-15 school year.

- **Enrollment and Retention Goal.** A target of CTE student enrollment at 90% of capacity was exceeded with actual enrollment registering 97.3% of capacity. Student enrollment in the CTE programs offered at New Horizons, in almost every instance, is higher than capacity. Interest is especially strong in Cosmetology, Culinary Arts, Criminal Justice, Pharmacy Tech and Veterinary Science programs. Retention goals of at least 90% were also met with just 6% of enrollees not continuing due to moving, health reasons, a lack of interest in the career field or chronic attention issues. The goal of having at least 75% of juniors in two year programs return for the second year was met in 2012-13 but not during the last two program years, falling to 70.0% in 2013-14 and 69.5% in 2014-15. Over the last two years, the Auto Body Repair and EMT programs have had the lowest return rates, partly due to student scheduling conflicts but also because of enrollment limits in some year II programs or lack of student performance in year I.
- **Industry Standards Goal.** Two student performance metrics were targeted in this goal, one to get at least 95% of program completers to try for an industry credential and the other to have 85% or more actually earn the credential. Both goals were met with all but one eligible student taking the credentialing exams and a total of 92.3% earning a credential. While students in Veterinary Science and Cosmetology/Barbering achieved a 100% passage rate, improvement is needed in the Auto Body Repair and Pharmacy Technician programs.
- **Student Pathways Goal.** A target of having at least 70% of CTE completers transition to post-secondary education or employment within one year after graduation was set for this goal. A follow-up survey with 2013-14 NHREC graduates found that 73% went on to post-secondary education or work but results were mixed:
  - 72% of the students responding said they were enrolled in post-secondary education or training within one year of graduation:
    - 49% in a community college
    - 31% in a four-year college or university
    - 6% enrolled in a technical school
    - 6% enrolled in training through their employer
    - The remaining percentage was “other”
  - 76% reported that their post-secondary area of study was somewhat or closely related to the CTE program they completed in high school
  - 4.5% reported being on active duty with US Armed Services
  - 40-42% said they were currently employed in a full- or half-time position
  - 60% reported that their current job was not in a field related to their CTE program completed in high school
  - 98% were satisfied or very satisfied with the preparation they received in their high school CTE program

Post-graduation data collected by NHREC in 2014 provides an insightful, expanded view of student preparation and performance in transitioning to college, postsecondary education, training, military enlistment and employment.

Upon graduation from New Horizons, a majority of graduates reported continuing their education by enrolling in either a community college or four-year university (students were allowed to use more than one response which is why percentages do not total 100%). A smaller percentage transitioned directly to employment (Figure 2).

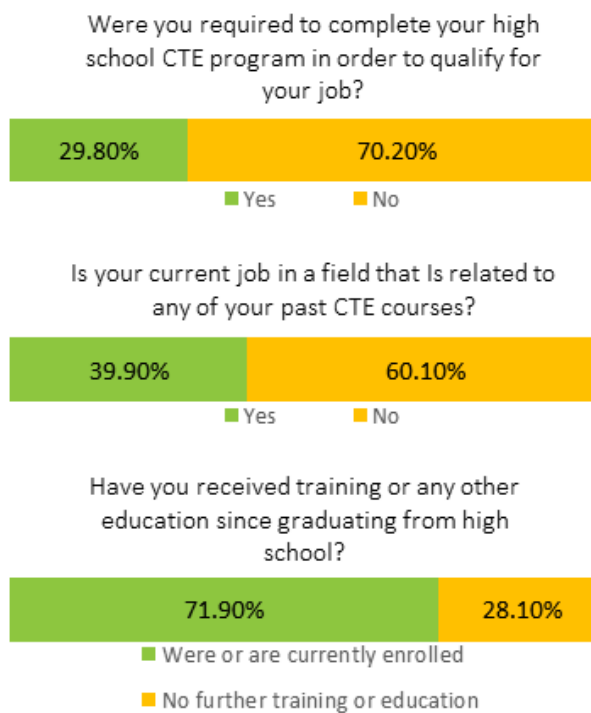
Figure 2. Types of Education Participated in Since High School



Among students who graduated from New Horizons and went to work, a majority of graduates (70.2%) were hired without regard to their CTE program but 40% were working in a job that was related to their CTE program.

Even among students who went directly to work, a majority (71.9%) said they had enrolled in or were currently enrolled in a postsecondary education or training program (Figure 3).

Figure 3. Working NHREC Graduates



Of graduates who reported working after graduating from New Horizons, a majority (58.4%) felt that the knowledge and training they received in their CTE program was being used in their current job (Figure 4).

Looking at the data for the majority of students who matriculated to a two- or four-year college, technical school or other postsecondary program after graduating from New Horizons, almost half chose a college or postsecondary program that was related to the CTE program they completed in high school while an almost equal number selected a program that was unrelated (Figure 5).

Overall, an overwhelming 98% of NHREC graduates expressed satisfaction with the preparation they received through their NHREC CTE programs (Figure 6).

Figure 4. Using CTE Knowledge on Job

How much of what you learned in your CTE courses are you using for your current job?

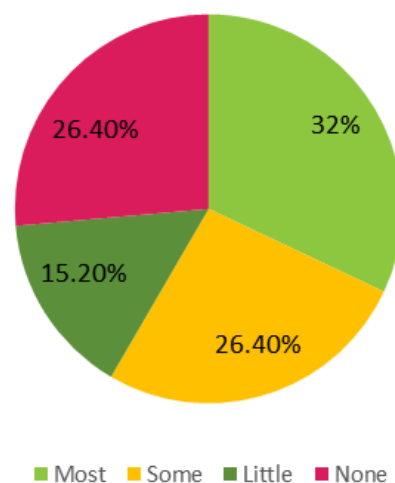


Figure 5. Related Postsecondary Studies

To what extent is/was your area of study related to the CTE program you completed in high school?

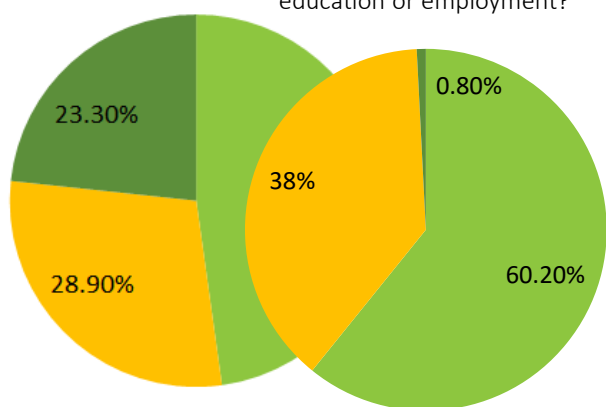


Figure 6. Graduate Satisfaction

Overall, how satisfied are you with the preparation you received in your high school CTE program for further education or employment?

Very Satisfied 38% Satisfied 60.20% Dissatisfied 0.80%



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## Appendix B

### National and International CTE Models

All of the national and international CTE models summarized below incorporate one or more of the twelve CTE model components described in Section II of this report. Though this list is not exhaustive, many of the excellent CTE models listed below are often mentioned in the literature as being innovative and effective.

- **Pathways**

U.S. states and territories receiving federal Perkins funding for CTE must create programs of study, often called Pathways, which align academic and technical high school courses into a sequence that prepares students for a career area and successful transition to work or postsecondary education after graduation. Though pathways models look different in each state, most include a majority of the CTE model components listed above.

- **Career Academies**

Many schools around the country employ the “career academies” approach operating as “schools within a school” using the Small Learning Communities (SLC) approach

- Academies allow students to self-select into one of five or six career academy areas
- Academic classes (e.g. math and English classes, for example) are often taught in an applied manner using examples or situations connected to the career academy area
- Examples of a variety of career academies include:
  - i. California’s Partnership Academies - [casn.berkeley.edu/cpa.php](http://casn.berkeley.edu/cpa.php)
  - ii. Big Picture Learning - [www.bigpicture.org/](http://www.bigpicture.org/)
  - iii. Georgia’s College and Career Academies – [georgiacareeracademies.org/](http://georgiacareeracademies.org/) – operate as independent, specialized charter schools, with grant funding from the Governor, “established by a partnership which demonstrates a collaboration between business, industry, and community stakeholders to advance workforce development between one or more local boards of education, a private individual, a private organization, or a state or local public entity in cooperation with one or more postsecondary institutions.”

- **Switzerland Model** - [www.ncee.org/swiss-vet](http://www.ncee.org/swiss-vet)

In March 2015, the National Center for Education and the Economy (NCEE) released a report calling Switzerland the “Gold Standard” for vocational education in the world:

*“If it is possible for an education system both to serve successfully the needs of adolescents and support their transition into adulthood and the needs of employers in a highly competitive economy, then Switzerland arguably does a better job than any other developed country.”*

The Swiss Vocational Education and Training (VET) program earns its reputation by:

- Actively engaging students by putting them in work settings with adults

- Paying students as apprentices – starting at \$600-\$700/month up to \$1,200/month
  - Engaging almost 30% of all Swiss businesses to participate by hiring 16-19 year old apprentices and by developing the industry qualifications, curriculum and assessments used in the classroom
  - Providing an apprenticeship credential at the end of the program that is portable and valued by employers
  - Allowing students multiple points of exit and entry
  - Students must choose their track of study by age of 15
  - About 80% of students in a VET type of program
- **GPS ED – Apprenticeship Model** - [gpsed.org/works/](https://gpsed.org/works/)

Similar to the Swiss model, GPS Ed provides 11<sup>th</sup> and 12<sup>th</sup> grade students with traditional academic classroom work plus manufacturing-specific courses such as Blueprint Reading, Computer Aided Design (CAD) and High Performance Manufacturing (MSSC Certification) in the morning, then students the rest of their day in a “manufacturing environment”

    - Students are paid as apprentices for doing work alongside business mentors who facilitate “structured training experiences”
    - Students rotate through numerous manufacturing job experiences with various business partners
    - Students have the chance to earn “stackable industry credentials, valuable employability skills and transferable, post-secondary college credits”
- **P-TECH** - [citizenibm.com/2012/02/p-tech-the-first-100-days.html](https://citizenibm.com/2012/02/p-tech-the-first-100-days.html)

The most well-known P-TECH program is the Pathways to Technology Early College High School program in New York with IBM as the sponsor. This model:

    - Was created and designed by the IT industry
    - Targets youth at grade 9 – including at-risk youth – and provides extensive academic supports but students must make a commitment to the program
    - Extends high school graduation to 1 or 2 years after high school, allowing students to earn an Associate’s Degree
    - Provides a business mentor for every student – one to one
    - Aims to seamlessly integrate high school to postsecondary to work transition
    - Graduates receive priority hiring consideration at IBM
- **New Jersey Talent Network** - [www.njtld.org/about\\_njtld](http://www.njtld.org/about_njtld)

According to their website, “Talent Networks have been established to focus on the specific needs of key industries in the state in order to connect employers, job seekers, the state's One Stop Career Centers and educational institutions to achieve the common goal of helping current job seekers develop relevant skills that lead to job opportunities, helping employers find qualified employees, and to ensure that New Jerseyans have access to training and educational opportunities that lead to the jobs of the future.”



- The program is funded by state labor and workforce development system and is for both high school students and adults
- The Talent Network comprises seven sectors which are the key economic drivers in New Jersey: Advanced Manufacturing; Financial Services; Health Care; Life Sciences; Retail, Hospitality and Tourism Technology; Entrepreneurship and Transportation, Logistics and Distribution
- New Jersey finances these sectors to “pinpoint the relevant skills that job-seekers need to get jobs in those major industry clusters” and to “link employers with the state’s educational institutions, employee training providers, state officials and job-seekers.”
- **Finland Model** - [www.minedu.fi/OPM/Koulutus/ammattillinen\\_koulutus/?lang=en](http://www.minedu.fi/OPM/Koulutus/ammattillinen_koulutus/?lang=en)
  - Accommodates multiple levels of learners from those going into a trade apprenticeship to those completing higher education
  - Offers very structured, very clear pathways to post-high school training but allows some flexibility when students change programs (given credit for prior learning)
  - About 50% of secondary students in VET programs
  - Students not “tracked” – postsecondary education choices not limited by secondary
  - Transitioning from teaching-based instruction to competency-based learning
- **Excellence for All Model** - [www.ncee.org/programs-affiliates/excellence-for-all](http://www.ncee.org/programs-affiliates/excellence-for-all)

The National Center on Education and Economy (NCEE) – which highlights Finland and Switzerland as global examples of high quality CTE programs – also supports the Excellence for All Model

  - Academic instruction is rigorous, based on international models of academic instruction
  - Instruction is competency-based, students progress from grade to grade only after proving mastery at one level
  - In the lower-division – grades 9-10 – students must meet one of two standards of competency (demonstration of proficiency through ACT QualityCore curriculum or pass the International Certificate of Secondary Education from University of Cambridge) before advancing to the upper division
  - Upper division students – grades 11-12 - have multiple choices:
    - i. Stay in school and complete one of 5 rigorous academic programs
    - ii. Proceed to a high school CTE program leading to an industry certification
    - iii. Transition to community college
    - iv. Or simply graduate from high school
  - 21 schools in the United States offer the programs in AZ, KY, CT, MS

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- **Southern Regional Education Board (SREB) Advanced Career Pathways**

The goal of the Advanced Career Pathways initiative is for students to “master complex academic *and* technical concepts and graduate ready for the workplace, technical colleges and universities.”

- AC Pathways are prescriptive Pathways that include aligning four CTE courses – two foundational courses and two more advanced courses - in a career area with rigorous academic instruction aligned to college credits.
- Coursework includes a solid academic core, authentic technical skills projects, employer and business involvement, end of course assessments and rigorous instructor training
- For more details see [http://www.sreb.org/page/1608/Advanced\\_Career.html](http://www.sreb.org/page/1608/Advanced_Career.html)

- **Linked Learning – [linkedlearning.org](http://linkedlearning.org)**

A California-based model that integrates rigorous academics – aligned with Common Core - with technical skills training

- One example of many types of Pathway programs used around the country
- Intentionally links high school CTE programs to postsecondary institutions
- Actively incorporates work-based learning

Other innovative CTE model components – which are worth checking out - include:

- Flipped Classroom - <http://blog.aeseducation.com/2013/01/flipped-classroom-a-new-blended-approach/>
- Makers Faires and Makerspaces - <http://makerfaire.com/makerfairehistory/>
- Badging for motivation - [www.launchpath.com/Badging/tabid/353/Default.aspx](http://www.launchpath.com/Badging/tabid/353/Default.aspx)
- Competency-based progression - <http://www.competencyworks.org/>
- Simulated workplace – West Virginia - <http://wvde.state.wv.us/simulated-workplace/>

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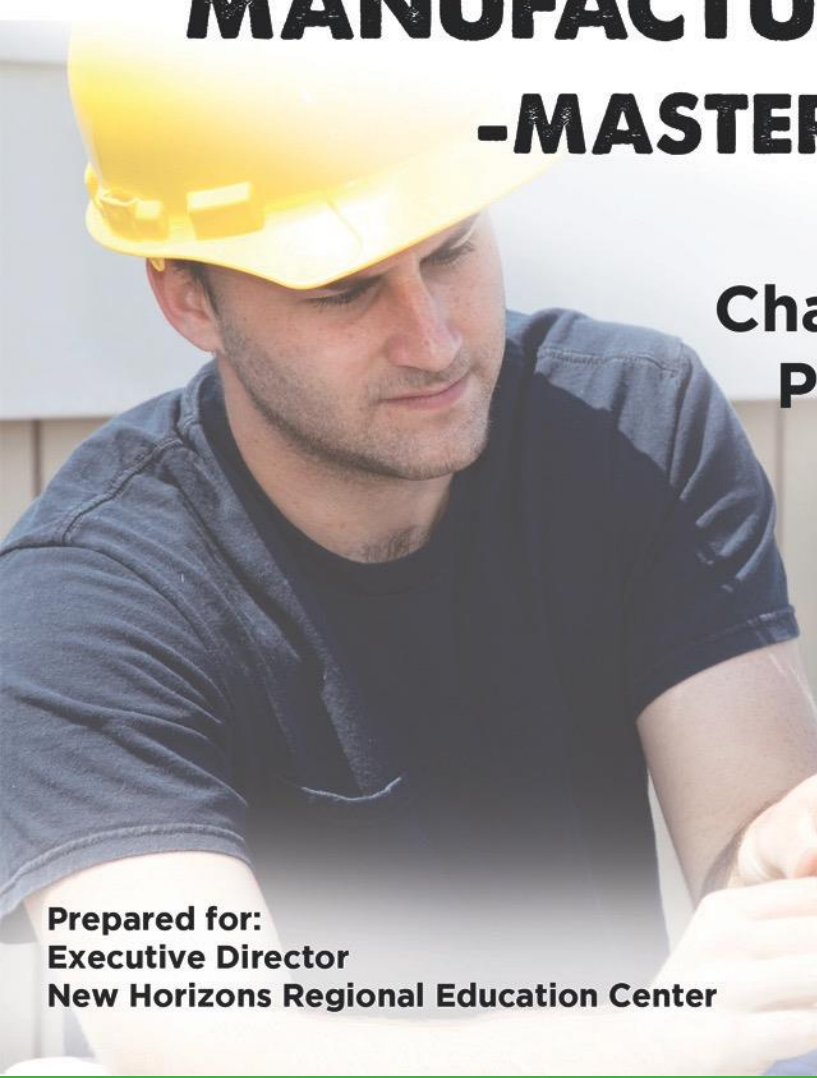
## Appendix C

### NHREC CTE 2025 Manufacturing Sector Master Plan





# **NHREC CTE 2025 MANUFACTURING SECTOR -MASTER PLAN-**



**Changing the way Virginia  
Peninsula Manufacturing  
Employers think about  
NHREC CTE Graduates**

**Prepared for:  
Executive Director  
New Horizons Regional Education Center**

**Prepared by:  
TMG, Inc.  
July 2015**





## Master Plan

July 1, 2015

- 1. Purpose:** The purpose of the NHREC CTE 2025 Manufacturing Sector Master Plan is to describe an integrated and synchronized partnership which will transform the traditional Career and Technical education paradigm on the Virginia Peninsula because we have re-defined the customer and our product. In the traditional model, the student is the customer and the product is graduates with certificates. In the CTE 2025 model, the customers are employers and the product is an energized Virginia Peninsula economy, where employers are able to run more efficient and profitable business by hiring and retaining better employees. Therefore, this Partnership is offering interested employers training, coaching, access to resources, and advocacy for those organizations that pledge to hire and retain CTE Graduates. The program uses industry best practices and state of the art theory to meet current and future hiring and retention needs through the employment of CTE Graduates. This program is for organizations desiring to improve their business performance through improved workforce productivity, reduced cost to hire, and believe that re-capitalizing their workforce with CTE Graduates should be part of that effort.
- 2. The Employer Market:** CTE 2025 also recognizes that CTE High School graduates will only represent about 10% of the overall hiring demand for less than 25% of the total number of Virginia Peninsula employers. According to the Virginia Peninsula Chamber of Commerce there are 14, 544 employers with more than 1 employee of which means 3,636 employers represent the market for CTE 2025 transformation. Given in 2015, NHREC CTE produced a total of 146 graduates our first goal is to “sell out” out graduates in 2016 while developing a market driven model to guide the development of future programs and curriculum and expanding the number of CTE High School graduates to meet the demand by the year 2025.
- 3. What’s Different about the NHREC CTE 2025 Manufacturing Sector model?**
  - a. Economic Development Initiative: CTE 2025 is not a Workforce Development Program
  - b. Supporting Employers Reducing Cost of Talent Acquisition and Retention: Our customer are employers with a hiring a demand for High School CTE Completer’s.
  - c. Public/Private/Not-for-Profit Partnership: CTE 2025 requires an employer-focused external presentation which makes employer engagement with Public and Not for Profit organizations easy and seamless, removing the complexity and mystery of the CTE education programs and processes across NHREC and the six School Divisions.

- d. Technical Program focused on 1<sup>st</sup> Job BFOQ (Bona Fide Occupational Qualifications) driven skills: CTE 2025 will never produce an experienced, technically qualified employee on the new hire's first day. CTE focuses on the initial entry-level worker and that employee's first job.
  - e. Requires Employer-focused Outreach, Marketing, Education, and Support: CTE 2025 must create the capability to educate and support employers first, then adjust the CTE offerings to meet their demands. We know that employers have as much difficulty speaking the language of education, as educators do speaking the language of business. It is the public sector's responsibility to provide education and training to those small and medium sized businesses, which need the assistance the most and have the least amount of overhead resources to fund internal systems.
  - f. Sequential Pathway to Postsecondary Training programs reducing the training cost to candidates and employers: CTE 2025 recognizes that a significant percentage of CTE High School graduates will matriculate to post-secondary education and training opportunities. While NHREC does not control these post-secondary offerings, it recognizes their value to employers who demand employees with more advanced skills or maturity.
  - g. Embedded Apprenticeships & Workplace Learning: Our core practice will be to allow employers to overlay their Recruiting and Hiring process on top of the candidate/students junior and senior years of High School. A key feature will be for NHREC to coordinate "on the job" experiences for candidate/students so they can get to know the employer better and the employer can reduce their risk of post-hire attrition.
  - h. Legislative Advocacy: As the program begins execution, we will identify legal and policy barriers to full realization of the CTE Goals and Objectives. We will fully research these barriers and provide the Commonwealth with advice and support to adjust laws and policies that will better support our mission.
  - i. Dedicated Program Management/Implementation Team: Creating the transformational change required to fully realize the CTE 2025 Vision will require a dedicated Program Management Team to create and lead the program. The key task will be to develop and implement an Employer-focused Strategic Communications, Marketing and Sales plan to identify, educate, train, and coach employers who wish to participate. This support function must have the capability to scale significantly because of the number of potential participating employers on the Virginia Peninsula.
  - j. Metrics Driven: The key outcome metric will be "# of Employers Hiring and Retaining CTE Completer's for 1 Year". This event is externally measurable via yearly tax returns under employee compensation increases due to this specific population which drives tax base increases. CTE 2025 is an economic development initiative.
4. **Mission:** The NHREC CTE 2025 Manufacturing Sector team will energize the Virginia Peninsula's manufacturing economy by creating a ready to learn entry level workforce pipeline enabling manufacturing EMPLOYERS to re-capitalize their workforce through recruiting, hiring, training, and retaining for 1 year, NHREC CTE student completer's or upon completion of a related post-secondary program. 1 Manufacturing Employer, 1 Job, 1 NHREC Graduate at a time!

- 5. Scope:** The overall scope of this effort is to allow for substantive and meaningful EMPLOYER Partnerships in creating a customized CTE training experience, based upon Virginia Peninsula Manufacturing Employers actual entry level job requirements. Then Virginia Peninsula Manufacturing Employers will hire and retain, for at least 1 year, those CTE qualified student completer's wishing to enter the workforce. Our focus is on EMPLOYERS.
- 6. Hypothesis:** If the NHREC CTE 2025 Manufacturing Sector Partnership allows for substantive and meaningful EMPLOYER Partnerships in creating a customized CTE training experience, based upon Virginia Peninsula Manufacturing Employers actual entry level job requirements, then Virginia Peninsula Manufacturing Employers will hire and retain for at least 1 year those CTE qualified student completer's wishing to enter the workforce.
- a. Employer Substantive and Meaningful Partnership Activity Examples:
- 1) Employer creates Order by providing Job/Position Descriptions
  - 2) Employer allows access to actual job environment to validate skills requirements
  - 3) Substantive Employer Engagement during CTE student experience such as Recruiting presentations, individual access to individual candidates, interviews, group activities, pre-hiring testing.
  - 4) Donates Training Curriculum along with Instructor support
  - 5) Provides Access to Equipment & Supplies to better re-create the actual job requirements either in NHREC or on the job site.
  - 6) Embedded Apprenticeships
  - 7) Workplace Learning opportunities such as summer or after school paid or unpaid internships
  - 8) Provides access to new employees after hiring to gauge progress
  - 9) Provide hiring and retention data for pre-hire adjustments and alignment
  - 10) Share best practices and lessons learned with other employers
  - 11) Others as agreed to by employer and NHREC.
- b. NHREC Substantive and Meaningful Partnership Activity Examples:
- 1) NHREC assists employer with translation of Job/Position Descriptions into programs and curriculum where those skills are taught and assessed
  - 2) NHREC allows employer access and education on current and future programs and competencies taught and measured.
  - 3) NHREC is responsive to substantive Employer Engagement requests during CTE student experience such as Recruiting presentations, individual access to individual candidates, interviews, group activities, pre-hiring testing.
  - 4) NHREC provides mechanism for donation Training Curriculum along with Instructor support and tax credits form donations when and where appropriate
  - 5) NHREC provides mechanism for contribution of and access to Equipment & Supplies to better re-create the actual job requirements either in NHREC or on the job site.
  - 6) NHREC provides on-site employer support for data capturing, additional training and coaching, and access to new employees after hiring to gauge progress



- 
- 7) NHREC provides analytical support based upon hiring and retention data for pre-hire adjustments and alignment and potential post hire retention techniques.
  - 8) Share best practices and lessons learned with other employers
  - 9) Others as agreed to by employer and NHREC.
- 7. Strategy:** To accomplish the mission our strategy must take the long view and be designed from the perspective of the Customer—Employers. A clear and compelling Customer focused strategy will then provide the critical path for others to provide supporting plans and activities to ensure success. (See Appendix C for detailed Year by Year Plan of Action and Milestones)
- a. Years 0: Exploration (Pre-enrollment): These are activities and events to encourage young adults to consider trades as a career option. These may include in school visits, influencing counselors and parents, and sharing best practice stories to show youths the advantages of this career choice. This exploration phase is not within the direct scope NHREC but usually the area of responsibility for the School Divisions.  
*Output: Student Registration*
  - b. Year 1: Recruiting (Program Focus): Employers will focus on identifying interested candidates from the population of enrolled first year CTE students. In the fall they will provide information about their business and market their jobs to perspective candidates. In the spring employers will identify potential workplace learning opportunities for selected candidates.  
*Output: Candidate Interest/Employer(s)*
  - c. Year 2: Candidate Preparation/Hiring (Candidate Focus): During this phase employers will narrow their candidates to those how best meet their needs and for which the candidates have the most information about the employer and the work to make a mature, informed judgement to pursue a career with that employer. In the fall, employers will identify their commitment recruits and in the spring will perform the pre-hiring process steps, issue the contingent offer, and conduct pre-employment customized training.  
*Output: New Hire Jobs Accepted*
  - d. Year 3: Transition (Performance Data): Beginning with the new employees first day then, the employer will train and orient them to their company and coach them to productivity in their 1<sup>st</sup> Job. NHREC will provide follow up support into the workplace to both track their performance but also to provide additional support on an “as needed” basis. Employers will also provide feedback on their new employees experience at NHREC for future programmatic adjustments.  
*Output: 1<sup>st</sup> Year Retention of Engaged and Productive in 1<sup>st</sup> Job*
  - e. Year 4: Performance (Validation and Evangelization): Year 2 is the ultimate measure of performance as the productive employee leaves their first job and begins the developmental journey to a fully productive teammate. Again, capturing performance data and using it to make adjustments are key NHREC support events.  
*Output: Improved Workforce Productivity/2<sup>nd</sup> & 3<sup>rd</sup> Job Performance*

**8. Voluntary and Positive Participation:** This program incentivizes employers who are committed to making CTE qualified graduates a part of their overall talent acquisition and retention strategy. Participation is totally voluntary, completely positive, and not pejorative in nature. Employers may enter and leave the program at any time and for any reason. The only reason high performing employers conduct talent acquisition and retention programs are to run a better business. Therefore, we must learn to talk and think as employers to ensure we are providing them a product and service to meet their needs. An Employer measures success in these terms:

- a. Decreased Cost to Hire
- b. Decreased Hiring Cycle Time
- c. Decreased Time to Competency
- d. Increased New Hire Engagement
- e. Improved Workforce Productivity
- f. Decreased First Year New Hire Attrition
- g. Decreased Labor Costs which Improves Earnings

**9. Program Theme: Win, Win, BIG Win!**

**Win** for CTE Completer/High School Graduate when they start a job with benefits as soon after their 18<sup>th</sup> birthday as possible, with the employer's intent to retain the Completer for 1 year.

**Win** for NHREC CTE to be the thought and action leader in changing the way America thinks about CTE completer's as another strategy for Manufacturing Employers to solve their Talent Acquisition and Retention demands

**BIG Win** for Employers: who can reduce their cost to hire, improve workforce productivity, and profit

**10. NHREC CTE 2025 Manufacturing Sector - Employer Qualifying Criteria:** We must set criteria to ensure our partnership efforts focus on those employers possessing talent acquisition demands that we can meet.

- a. Do you have a Hiring Demand for at least 1 year in the future?
- b. Are CTE completer's/High School graduate part of your Talent Acquisition and Retention Pipeline Strategy?
- c. Do you accept responsibility to ensure that New Hires are productive and trained to meet your specific job requirements?
- d. Are you willing to substantively begin your Talent Acquisition and Retention system during a High School students junior and senior years while enrolled in a CTE program?

NOTE: None of these criteria disqualify employers from entering the NHREC CTE Manufacturing Sector Partnership. The intent is to ensure employers enter the program knowing this may require changes to some of their current practices in order to focus on the outcome metric of 1-year retention.

**11. NHREC CTE 2025 – Manufacturing Sector Partnership** recognizes that every employer will have a unique Pipeline system based upon size, skills required and hiring forecasts. The program looks to Enterprise organizations like Newport News Shipbuilding, Ferguson, Canon to serve as early adopters of the CTE system because they have the resources to create their own customized pipelines. The true focus of CTE 2025 is to meet the needs of small and medium sized businesses. They generate the most jobs cumulatively, have the least resources available to fund their talent acquisition and retention systems, and have the biggest need for public support as long as that public support is easy, low cost, and meet their small volume needs. Complexity means increase effort and cost which will prevent partnership participation by these employers in the most need. Enterprise employers have a specific role within the NHREC CTE 2025 Manufacturing Sector Partnership to “lead by example”. This may include sponsoring or hosting CTE Conferences, hosting CTE Field Trips, providing charitable donations of curricula and material, and promoting the NHREC CTE 2025 Manufacturing Sector Partnership among their network of companies, specifically their supply chain companies. The CTE 2025 program is customized for employers in the following classifications:

- a. Small:
  - 1) Single Site
  - 2) Under 50 people
  - 3) Hires ~ 10 people/year
  - 4) Hires on an as needed basis
- b. Medium:
  - 1) Single Site
  - 2) Between 51 – 300 people
  - 3) Hires 10 – 50 people/year to include Temps
  - 4) Episodically hires as needed
- c. Large:
  - 1) Single Site
  - 2) Between 301 – 1,000 people
  - 3) Hires 51 – 200 people/year in include Temps
  - 4) Has a consistent/predictable Annual Hiring and Retention Forecast (monthly)
- d. Enterprise:
  - 1) Single or Multiple Sites
  - 2) Over 1,000 people

- 
- 3) Hires over 500 people/year in include Temps
  - 4) Has a consistent/predictable Annual Hiring and Retention Forecast (monthly)

## 12. NHREC CTE 2025 – Manufacturing Sector Partnership Metrics and Annual Report

In order to validate and report the progress of the program, the NHREC CTE 2025 Manufacturing Sector Partnership team will maintain the following metrics and prepare an Annual Report for the certifying authority which may contain data such as:

Annual Outcome Metrics:

Employer Education Workshops	_____
Educated Employers	_____
Pledging Employers	_____
<b>Jobs Pledged</b>	_____
<b>Available CTE Candidates</b>	_____
Actual Job Starts	_____
1 <sup>st</sup> Year Retained	_____
2 <sup>nd</sup> Year Retained	_____

**On a Mission!**

**1 Employer, 1 Job, 1 NHREC Graduate at a time**

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## Appendix A: CTE 2025 Plan of Action and Milestones by Key Stakeholder

### Years 0: Exploration (Pre-NHREC CTE enrollment):

These are activities and events to encourage young adults to consider trades as a career option. These may include in school visits, influencing counselors and parents, and sharing best practice stories to show youths the advantages of this career choice. This exploration phase is not within the direct scope NHREC but usually the area of responsibility for the School Divisions.

- Input: High School Students
- Employer:
  - Participates in Branding , Marketing, and Educational Events
  - Field Trips
  - Counselor Education
  - Parent Education
- Candidate (Student):
  - Career Exploration
  - Interest Assessments
  - Submits Registration for CTE Program
  - Output: Candidate Accepts CTE Program Offer
- New Horizons
  - Serves as a Resource/Coordination Center between School Districts and Employers
  - Provides Education and Information to interested employers
  - Announces Program and Accepts/Screen Applications
  - Provides Offers
- Event(s): CTE Job Fair for Interested Candidates (Spring)
- Output: CTE Student Registrations by Program

### Year 1: Recruiting (Program Focus):

Employers will focus on identifying interested candidates from the population of enrolled first year CTE students. In the fall they will provide information about their business and market their jobs to perspective candidates. In the spring, employers will identify potential workplace learning opportunities for selected candidates.

- Input: Registered CTE Students enter CTE Program in Fall. Output: Candidate Pool/Employer
- Employer:
  - Decides Number of Candidates Required to meet plus 2 year Hiring Demand for HS Graduates (e.g. 1 Hire = 4 Candidates)
  - Evaluates CTE Programs for relevancy
  - Provides Curriculum and Instructional Support as required

- Offers Web Based Realistic Job Previews to inform Candidates
- Conducts Recruiting Visits to Classroom
- Observes and Interacts regularly
- Identifies Internship/Part-Time Summer Work Opportunities
- Output: Employer Selects Candidates
- Candidate (Student):
  - Assesses Employers for Fit and Opportunity
  - Accepts Candidate Offer from 1 or more Employers
- New Horizons:
  - Provides Employer Candidate Information
  - Allows Employer to conduct on and off campus recruiting visits.
  - Manages the Employer engagement levels to ensure non-disruption to Candidates Experience
- Events
  - August: Employer Training and Education Event
  - November: Employer Recruiting Visits
  - March: Summer Internship/Employment Visits
- Output: Candidate Interest/Employer(s)

## **Year 2: Candidate Preparation/Hiring (Candidate Focus):**

During this phase employers will narrow their candidates to those how best meet their needs and for which the candidates have the most information about the employer and the work to make a mature, informed judgement to pursue a career with that employer. In the fall, employers will identify their commitment recruits and in the spring will perform the pre-hiring process steps, issue the contingent offer, and conduct pre-employment customized training.

- Input: Employer Candidates Output: New Hire Accepts Contingent Offer
- Employer:
  - Provides Candidate Program Customization Request to NHREC
  - Provides employer specific Training on a case by case basis
  - Conducts Pre-Hire Testing, Drug Screening, Background Checks, etc.
  - Conducts Interviews
  - Makes Contingent Offers
  - Provides continuous Navigator like contact to ensure Selected Candidates remain engaged
  - Conducts New Hire Orientation
- Candidate (Student):
  - Prepares, researches, and make Employer Selection
  - Understand what they do, and how they can fit.
  - Completes Application/Resumes
  - Final Interviews
  - Output: Accepts Contingent Offer
- New Horizons Regional Education Center

- Tracks and manages the Employer – Candidate partnership
- Allows Employer to conduct on and off campus recruiting visits.
- Manages the Employer engagement levels to ensure non-disruption to Candidates Experience
- Event: CTE Completer’s Ceremony (June)
- Output: New Hire Jobs Accepted

### **Year 3: Transition (Performance Data):**

Beginning with the new employee’s first day then employer will train and orient them to their company and coach them to productivity in their 1<sup>st</sup> Job. NHREC will provide follow up support into the workplace to both track their performance but also to provide additional support on an “as needed” basis. Employers will also provide feedback on their new employees experience at NHREC for future programmatic adjustments.

- Input: New Hires    Output: Engaged and Productive in 1<sup>st</sup> Job
- Employer:
  - Conducts New Hire Training
  - Trains 1<sup>st</sup> Line Supervisors
  - Measures New Hire Engagement and Performance
  - Provides clear Expectations
  - Provides Peer Mentor/Navigator
  - Meets their Entry Level Hiring/Demand
  - Retains New Hires and tracks data
- New Teammate:
  - Meets and Exceeds Work Habits Expectations
  - Works Hard
  - Performs
  - Output: Engaged and Productive in 1<sup>st</sup> Job
- New Horizons Regional Education Center
  - Captures Employer Feedback on both Habits and Skills
  - Captures New Hire Feedback on both Habits and Skills
  - Assesses and adjusts current Programs based upon
- Events: Employer Feedback and CTE Program Adjustment Conference (January)
- Output: 1<sup>st</sup> Year Retention of Engaged and Productive in 1<sup>st</sup> Job

### **Year 4: Performance (Validation and Evangelization):**

Year 4 is the ultimate measure of performance as the productive employee leaves their first job and begins the developmental journey to a fully productive teammate. Again, capturing performance data and using it to make adjustments are key NHREC support events.

- Input: Engagement Productive Teammate in 1<sup>st</sup> Job    Output: Transition to Full Productivity/Life Long Learner

- 
- Employer:
    - Transitions New Hire to Full Teammate
    - Provides more training and education to accelerate workforce productivity
    - Updates their Talent Acquisition and Retention Strategy based upon Best Practices and Lessons Learned
  - Teammate:
    - Plays to Win!
    - Seeks more training and ways to be more productive
    - Increases engagement and prepares for 2<sup>nd</sup>/3<sup>rd</sup> role in organization.
    - Becomes Recruiter for others like them.
  - New Horizons Regional Education Center
    - Captures Employer Feedback on both Habits and Skills
    - Captures Full Teammate Feedback on both Habits and Skills
    - Assesses and adjusts current Programs based upon Best Practices and Lessons Learned
  - Events: Employer Feedback and CTE Program Adjustment Conference (January)
  - Output: Improved Workforce Productivity/2<sup>nd</sup> & 3<sup>rd</sup> Job Performance through the 2<sup>nd</sup> year



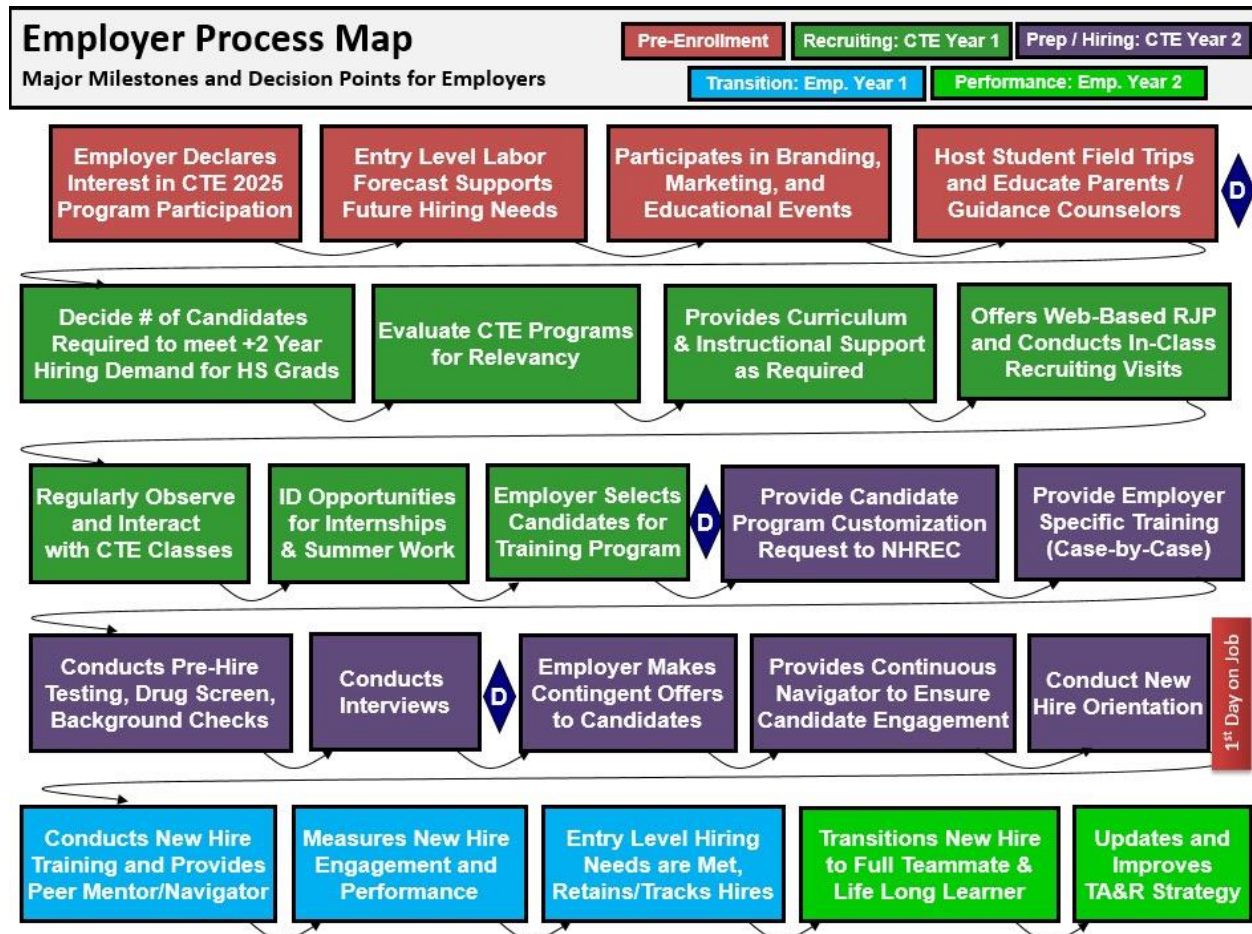
## Appendix B: Detailed Process Maps for NHREC CTE 2015 Manufacturing Sector Stakeholders

### ALL STAKEHOLDERS:

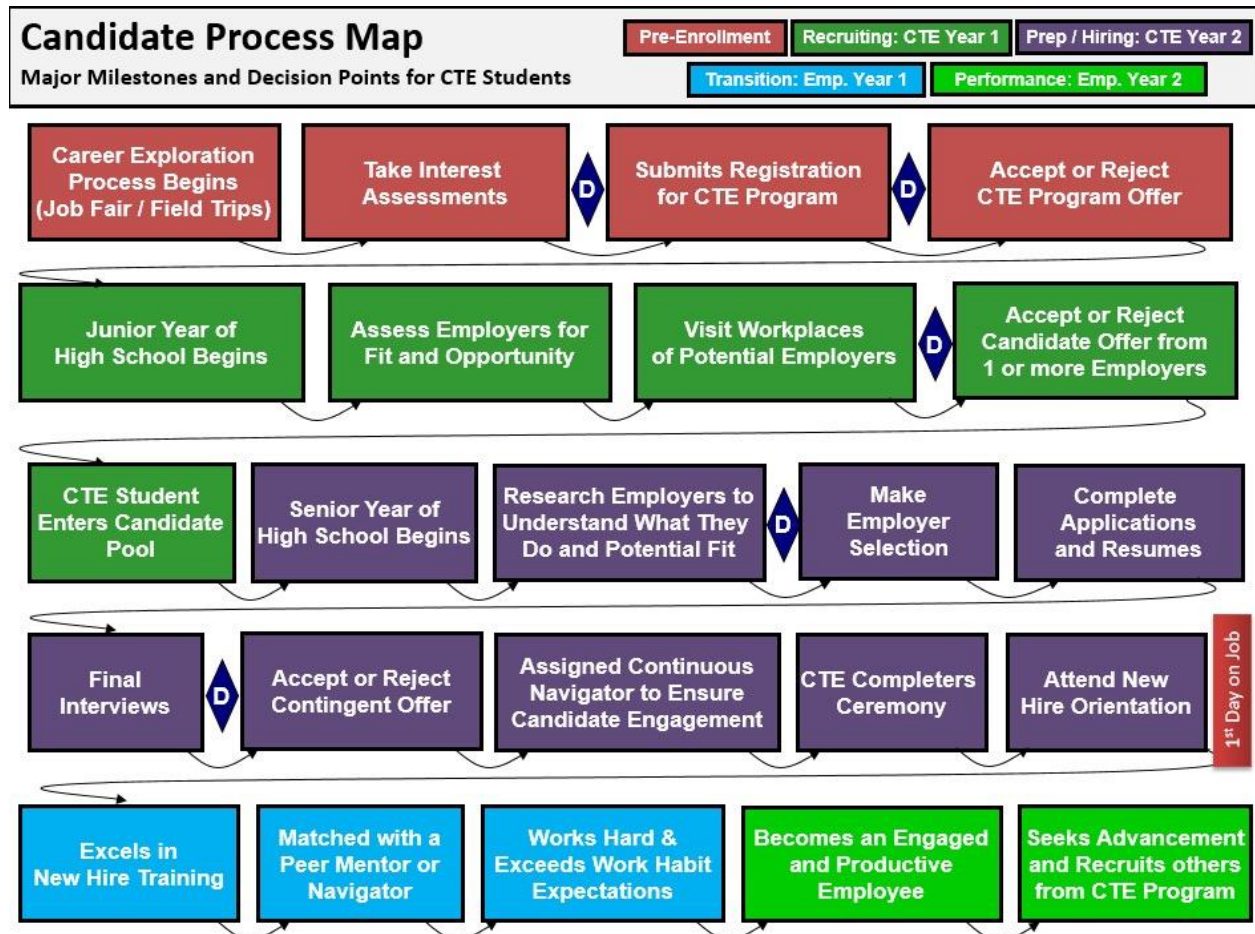




## EMPLOYER PROCESS MAP:

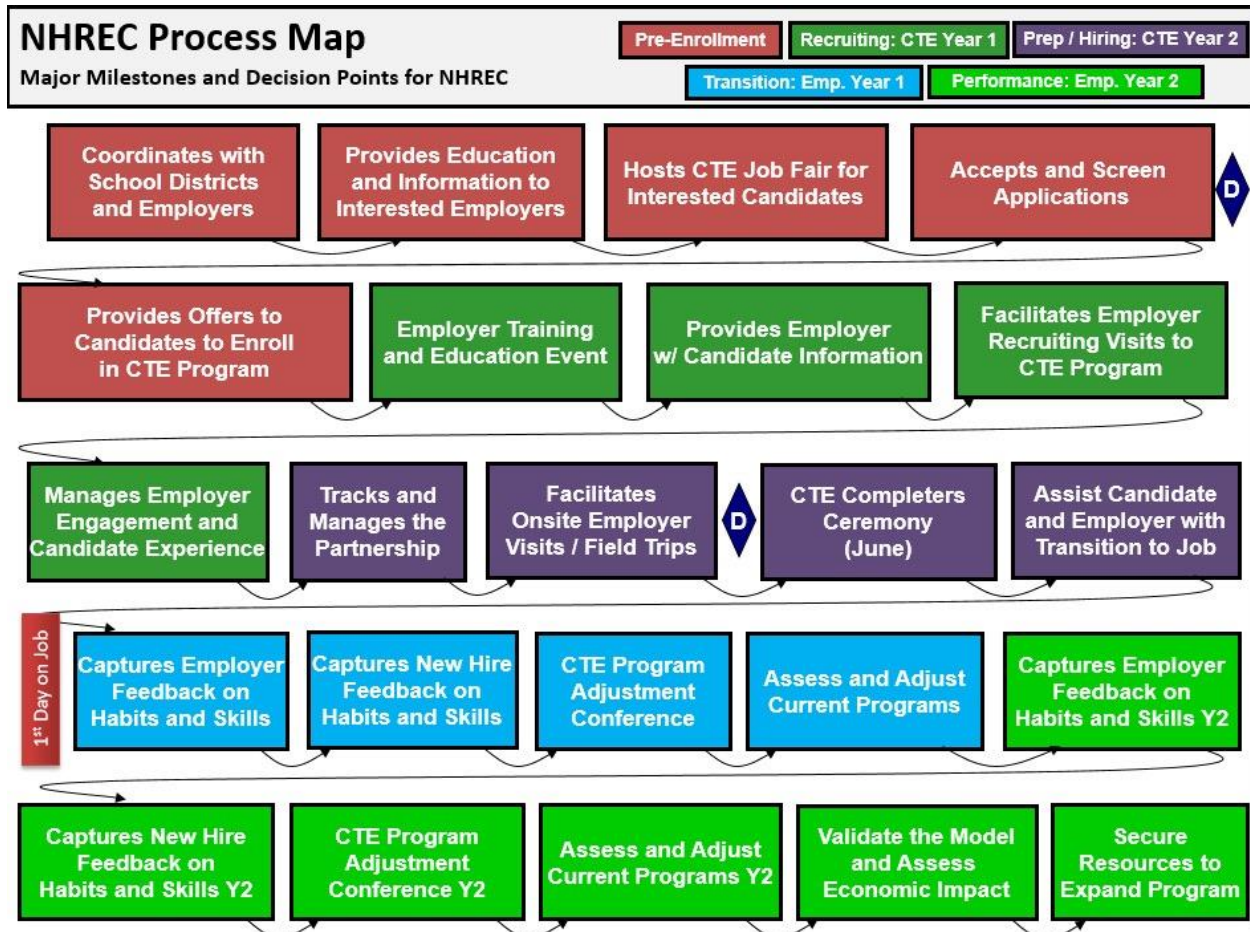


## CANDIDATE PROCESS MAP:





## NHREC PROCESS MAP:



## Appendix C: NHREC CTE 2025 – Manufacturing Sector Partnership: Program Management

Key to success of the CTE 2025 Master Plan is a dedicated Program Management capability to perform the following tasks.

1. Strategic Communications and Marketing
  - a. Work with the local Chambers of Commerce and Workforce Development organizations to define the Market and define the High Priority Employer Targets
  - b. Employer Out Reach
  - c. Sharing CTE 2025 Awareness and Information
  - d. Conduct awareness campaign and events to recruit Public-Private-Non Profits to the Management Team and commitments/pledges
2. Employer Education and Training
  - a. Identify Skills Gap between business Position Descriptions for entry positions and NHREC programs and curriculum
  - b. Identify business employment assessment instruments, pilot implementing and identify educational curriculum revisions
  - c. Conduct Bi-monthly Employer Education Events to qualify Employer to join the program.
  - d. Conduct individual training sessions to define and coordinate NHREC-Employer Pledge Letter.
3. Program Management
  - a. Employer Support Providing Employers Candidate Information, Fostering Recruiting Visits, Managing Employer Engagement Levels
  - b. Tracking and Managing the Employer – Candidate Partnership, Fostering On/Off Campus Recruiting Visits, Manages Engagement
  - c. Capturing Employer and New Hire Feedback on Habits and Skills, Assessing and Adjusting Current Programs Accordingly
  - d. NHREC & School Systems Support
  - e. Chair, prepare and execute the monthly Program Management Review
  - f. Resource Generation and Coordination
  - g. Keep the Score
  - h. Analysis and Program Adjustments
  - i. Manage 3<sup>rd</sup> Party Support
  - j. Serving as a Resource/Coordination Center between School Districts & Employers, Educate Employers
  - k. Validating the CTE Model and Economic/Community Impact, Gathering Data to Obtain Additional Resources

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## **Appendix D: SY2015-2016 Plan of Action and Milestones**

The Master Plan reflects the CTE 2025 program at full implementation. CTE 2025 also acknowledges that the first School Year (SY2015-2016) will require an extraordinary act of leadership by the NHREC CTE 2025 Team to fully vet the concepts enclosed with all of the stakeholders, to resource the program which represents a significant change in the current planning, programming, budgeting, and execution model from the six School Divisions.

Additionally, CTE 2025 recognizes that while these strategic leadership challenges are addressed, at a tactical level we are actually implementing the appropriate CTE 2025 components to the maximum extent possible in SY2015-2016 to show our resolve to be the leader of this transformational change.

The following reflects a plan of action and milestones for SY2015-2016 reflecting both the strategic and tactical events which must occur to provide the “bow wave” of success to create the transformational change required.

### **July 2015:**

- Recruit and Enroll Public/Private Partners (Educational Events Conducted Bi-Monthly)
- Detailed Planning, Define Roles and Responsibilities, and form Implementation Team

### **August 2015:**

- Announce CTE 2025 Transition Year Plan

### **September 2015:**

- Classes Start
- Conduct Private/Public Partnership Employer Training and Planning Workshop
- Define June 2016 hiring demand by volume and skills
- Define Employer-requested Curriculum Adjustments

### **October 2015:**

- Announce Program to Candidates (Students)
- Begin Employer Awareness Campaign
- Instructors assess Student Career Interest to identify Employment Candidates
- CTE 2025 Strategic Planning Workshop

### **November 2015:**

- Employer On-Campus Recruiting Visits
- SY16-17 Employer Awareness Education and Interest Generation Conference

### **December 2015:**

- Employer/Candidate “Matching” Sessions
- CTE 2016-2017 Program Announcement and CTE Registration

### **January 2016:**

- Employer/Candidate “Matching” Results Announced
- Mid-Year CTE 2025 Program Review
- SY16-17 Planning Session

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**February 2016:**

- Candidates begin employer customized pre-hire training as appropriate

**March 2016:**

- Employers conduct Pre-Hire testing and screening
- Finalize SY2016-2017 Plan
- Conduct Private/Public Partnership Employer Training and Planning Conference

**April 2016:**

- Employers conduct final Candidate Interviews and Selection
- Employers make Contingent Offers and begin Closing Process by “Signing Day”
- CTE 2025 Strategic Planning Workshop; adjustments to CTE 2025 Master Plan
- Candidates for 2016-2017 Screened and Selected

**May 2016:**

- Candidates accept Contingent Offers on “Signing Day”
- SY2016-2017 Detailed Planning and Preparation of 2016-2017 CTE 2025 Program Announcement

**June 2016:**

- CTE Completers Ceremony
- CTE 2025 Employers Annual Conference
- Announce SY2016-2017 plan with SY2015/2016 metrics
- CELEBRATE!



**Memorandum of Understanding**

Between

(NHREC) and (Employer - Partner)

This Memorandum of Understanding (MOU) sets the terms and understanding between the NHREC and the (employer - partner) to participate cooperatively in the NHREC CTE 2025 – Manufacturing Sector Partnership for the School Year 2015-2016.

**EMPLOYER understands and pledges:**

- a. To Hire and Retain for 1 year \_\_\_\_ NHREC CTE Graduates meeting my companies needs in the Summer of 2016.
- b. We have a Hiring Demand for the future (Summer of 2016).
- c. High School CTE completers are a part of our Talent Acquisition and Retention Pipeline Strategy.
- d. We accept responsibility to ensure the New Hires are productive and trained to meet our specific 1<sup>st</sup> job requirements and encourage them to be successful.
- e. We are willing to substantively begin your Talent Acquisition and Retention system during a High School students junior and senior years while the candidates are enrolled in a CTE program.
- f. We are willing to allow NHREC to enter our workplace to better understand our needs and to educate NHREC on our operational circumstance.
- g. We are willing to share New Hire performance data to ensure future program improvements and core data for metrics tracking and reporting.
- h. (Any specific terms: TBD)

**NHREC CTE understands and pledges:**

- a. We will translate your position descriptions and job requirements into the knowledge, skills, and abilities of our students; your candidates.
- b. We will support your development of a high performance Talent Acquisition and Retention Pipeline Strategy to meet your specific hiring needs including post-secondary education sources.
- c. We will allow you access to candidates to conduct recruiting, hiring, pre-training based upon your unique requirements and our program offerings. We agree to customize our learning/training paths to meet your demand where reasonable.

- d. We are willing to substantively begin your Talent Acquisition and Retention system during a High School students junior and senior years while enrolled in a CTE program.
- e. We will provide an outreach and support capability for our graduates once they enter your workplace to improve their success rate.
- f. (Any specific terms: TBD)

### **Duration**

This MOU is at-will and may be modified by mutual consent of authorized officials from (list partners). This MOU shall become effective upon signature by the authorized officials from the (list partners) and will remain in effect until modified or terminated by any one of the partners by mutual consent. In the absence of mutual agreement by the authorized officials from (list partners) this MOU shall end on (end date of partnership).

### **Contact Information**

NHREC Representative/Position

Address

Telephone

Fax

E-mail

Employer Partner Name

Employer Partner Representative/Position

Address

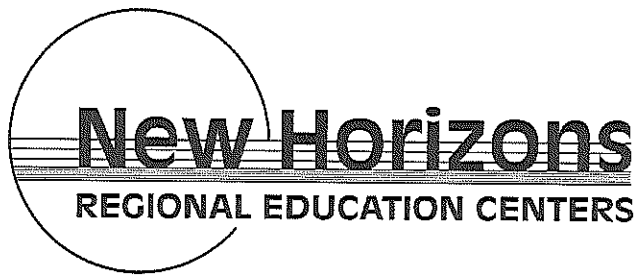
Telephone

Fax

E-mail


\_\_\_\_\_ Date:  
(Partner signature)  
(Partner name, organization, position)

\_\_\_\_\_ Date:  
(Partner signature)  
(Partner name, organization, position)



January 24, 2017

TO: Members of the Board of Trustees and Superintendents

FROM: Joseph Johnson, Executive Director 

SUBJECT: **2017-43 Director's Report**

**A. February is Board Appreciation Month**

**B. February is CTE Month**

CTE Month® is a public awareness campaign that the Association for Career and Technical Education (ACTE) holds each February to celebrate Career and Technical Education and the achievements of CTE programs across the country. The 2016 CTE Month 2016 theme is "Opportunities for Career Success."

<https://www.acteonline.org/ctemonth/>.


**C. Woodside Lane CTE Renovation**

Final demolition plan, technology and surveillance plans and culinary lab layout have been completed with final architectural drawings to be completed by the end of February.



January 24, 2017

TO: Members of the Board of Trustees and Superintendents

FROM: Joseph Johnson, Executive Director 

SUBJECT: **2017-44 Announcements and Information**

The attached documents are provided for the Board's information only. In the interest of time, we will not discuss the attachments at the meeting. If you have any questions or comments regarding any of the attached documents, please feel free to contact me at any time. If you would like copies of any of the attached documents, please contact Ms. Standley.

Attachments

**Clare Du: Tabb HS, Class of 2016**

Hi Professor Walk!

I hope you are doing well. I thought that I would update you on how everything is going in college! I am enjoying Princeton a great deal. The campus is so beautiful and there is so much that I am able to do. My classes are certainly very challenging, but Governor's School, and especially your class, prepared me well. Currently I am in the engineering school, pursuing a major in either electrical engineering or computer science. I am also working in a research lab on campus, called the Lightwave Communications Lab, which is very cool! The lab conducts research in photonics and light signal processing.

Also, I am applying for several international internships through Princeton's International Internship Program, and I would like to ask you if you would be willing to be one of my references. If you are willing, I will put your contact information down on my application.

Thank you so much, and I hope you have a great day!

Sincerely,

Claire Du

**Vikki L. Wismer**

Director

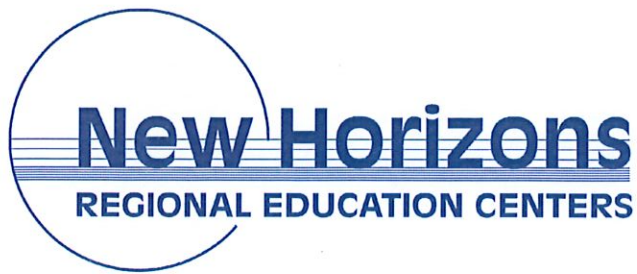
Governor's School for Science and Technology - GSST

520 Butler Farm Road

Hampton Va, 23666


Phone: 757-766-1100 ext: 3313

Fax: 757-224-5421



January 24, 2017

TO: Members of the Board of Trustees and Superintendents


FROM: Joseph Johnson, Executive Director 

SUBJECT: **2017-45 Discussion of Current Issues for Board Members and/or Superintendents**



January 24, 2017

TO: Members of the Board of Trustees and Superintendents

FROM: Joseph Johnson, Executive Director 

SUBJECT: **2017-46 Closed Session**

If required, Board members, the Superintendent-in-Charge and the Executive Director will enter a closed session to discuss personnel issues according to Section 2.2.3711(A)(1) of the Code of Virginia.