ICCB Program Review Report

WAUBONSEE
COMMUNITY COLLEGE

August 2018

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Academic Disciplines	
College Name:	Waubonsee Community College
Fiscal Year in Review:	2017-2018
Discipline Area:	English
Review Summary Complete this section to review the Academic Discipline as a whole. Use the Course Specific Review portion of this template for each course reviewed in the Discipline.	
Program Objectives What are the objectives/goals of the discipline?	Students will further develop rhetorical skills in written communication through standard usages of U.S. English, rhetorical conventions, and documentation skills in various writing contexts. Students will sharpen critical thinking skills through constructing arguments and solving rhetorical problems. Students will develop information literacy through the judicial selection and ethical use of research. Students will further develop textual analytical skills. Students will develop an appreciation for written texts. Students will develop an appreciation for English as a discipline. Students will be transfer ready at the completion of foundational writing and literature courses.
To what extent are these objectives being achieved?	We have an assessment process for First-Year Composition I and II. We have collected two years of data regarding Composition. We received approval for our outcomes for literature and other writing courses this year and will begin our formal five-year assessment cycle this upcoming year. Our discipline objectives are new this year and we will be working during the next academic year to determine the extent our objectives are being achieved.
How does this discipline contribute to other fields and the mission of the college?	The reading and writing skills learned in English courses are fundamental to success in the academic and professional worlds. English courses are a requirement of nearly every degree program at Waubonsee.

Prior Review Update Describe any quality improvements or modifications made since the last review period.	Improvements include adding course outcomes to all of the English courses. Two courses were withdrawn due to low enrollment over several years: ENG227 Contemporary American Thought and ENG260 Postcolonial Literatures. Also, prerequisites were taken off the 200-level literature courses so that students that intend to transfer as an English major could finish their English course sequence in two years. This fall we are conducting a pilot with two sections of a co-requisite course, ENG099 Supplemental First-Year Composition I, to support those students who need additional supplemental instruction in ENG101.

REVIEW ANALYSIS

Complete the following fields and provide concise information where applicable. Please do not insert data sets but summarize the data to completely answer the questions. The review will be sent back if any of the below fields are left empty or inadequate information is provided.

Indicator 1: Need	**Response**
1.1 What mechanisms are in place to determine programmatic needs/changes for AA, AS, AFA, and AES academic programs? How are programmatic needs/changes evaluated by the curriculum review committee and campus academic leadership?	Several processes are in place to determine programmatic needs and changes for the AA, AS, AFA and AES academic programs. Faculty participate in state and national organizations meeting several times a year, and learn trends and changes in curriculum. Faculty are also active in state-wide initiatives such as the Illinois Articulation Initiative (IAI), which are key resources for staying current. Each academic division is also assigned a specific counselor as a mechanism to gather student feedback and changes coming from transfer institutions. Faculty then collaborate with their deans on curricular changes that address discipline needs. The dean and faculty will also study data provided by the college's Institutional Effectiveness Department as well as the data gathered from the professional organizations and transfer institutions. All proposed changes are reviewed by the college's Curriculum Council. A checklist is in place to be completed prior to a council submission. The checklist was designed to encourage originators to have discussions with a variety of departments on campus to provide an opportunity for additional feedback related to the intended change. The discussions also serve as an additional way to evaluate needs. Curriculum Council meets twice per month in the fall and once a month in the spring semester, and is comprised of program faculty, academic deans and other staff directly involved in curriculum. The Council is chaired by the Vice President of Educational Affairs (VPEA). Additional programmatic discussions make up a part of the Curriculum Council meetings. Through a formal process, faculty approve changes or make recommendations for additional revisions. All submitted changes are approved by the Vice President of Educational Affairs.

1.2 How are students informed or recruited for this program?	Students will be informed and recruited for this discipline in their high schools, at the Career Pathways events, tours of the campuses, and through advertising. Faculty also participate in recruiting events such as the annual College Night, the annual Exploring Majors Fair, and college open houses.
INDICATOR 2: COST EFFECTIVENESS	***RESPONSE***
2.1 What are the costs associated with this discipline?	The direct costs associated with the program include: • Faculty salary and benefits (full-time and part-time) • Instructional supplies • Technology, software and services • Publications and dues • Full-time faculty professional development
2.2 What steps can be taken to offer curricula more cost-effectively?	The costs associated with this program is $1813.41 per load hour which is 10% less than the institutional average of $2002.00 per load hour.
2.3 Is there a need for additional resources?	The college pays for this program and its costs through tuition and fees.
INDICATOR 3: QUALITY	***RESPONSE***
3.1 Are there any alternative delivery methods of this discipline? (e.g. online, flexible-scheduling, accelerated, team teaching, etc.)?	English courses are offered in face-to-face and online formats. A small number of sections have been offered as hybrid courses for our one-year associates degree program for the past two years.
3.2 If the college delivers the course in more than one method, does the college compare success rates of each delivery method? If so, how?	We look at the successful completion of courses based on the modality. Fall 2012 to fall 2016 the data shows: English 101-Face-to-Face: 73% of students complete courses successfully with a C or better. English 101-Online: 64% of students complete courses successfully with a C or better. English 102-Face-to-Face: 64% of students complete courses successfully with a C or better. English 102-Online: 70% of students complete courses successfully with a C or better.
3.3 What assessments does the discipline use to measure full-time and adjunct instructor performance in the classroom?	Classroom observations are performed for adjunct and non-tenured instructors and student evaluations are performed for all instructors. Full time instructors have the option to change evaluation questions once a year. Dual credit instructors are assessed by the same student evaluations that on-campus faculty use.

3.4 How does the discipline identify and support at-risk students?	We have begun departmental analysis of data regarding D's, W's, and F's in courses to identify at-risk student groups. We encourage faculty to participate in the Early Alert system and other initiatives across all campuses, send students to the Writing Center, and work with struggling students more closely. We recommend that all campuses have writing and tutoring centers.
3.5 To what extent is the discipline integrated with other instructional programs and services?	Nearly every degree program has an English course requirement. English is a part of the Communication, Fine Arts and Humanities Division. The department discusses student trends with the Developmental English department. The department coordinates with other departments to bring speakers to campus. Some of our faculty teach within other disciplines such as film studies, women's studies, peace studies, leadership and college success courses. We integrate with Student Activities for the production of the Horizons literary magazine and the Skyway Writers competition and festival. We also work with the Access Center for Students with Disabilities and the student-athlete support program. Many of our 200-level courses are included as electives within degree programs offered in other divisions. In particular, Children's Literature is within the education and child care program and technical writing courses exist within the business and information systems program particularly.
3.6 What does the discipline or department review when developing or modifying curriculum?	The department typically tasks faculty with specialties for specific courses to develop or modify curriculum. Courses such as Composition are developed and modified as a group with all faculty that teach the courses. This is done in consultation with the standards of professional associations in the discipline of English. For example, the department engaged in a recent revision of English 235, Short-Stories to Novels: Examining fiction by soliciting input from all full-time faculty members and engaging in productive debate. We also collaborated with the developmental division in course design for a supplemental instruction course paired with English 101. We recently modified the 200-level course curriculum scheduling based on our analysis of student needs.
3.7 When a course has low retention and/or success rates, what is the process to address these issues?	We meet to determine issues or problems, then request relevant data from Institutional Research and determine a course of action. A recent result of the process was the adjustment of course scheduling. Courses were scheduled on a cycle that eliminates redundancy and provides greater benefit for English majors. The department is also actively engaged in researching retention and success rates to improve success rates for First-Year Composition I and II.
LIST ANY BARRIERS ENCOUNTERED WHILE IMPLEMENTING THIS DISCIPLINE.	

The largest barrier to implementing the discipline is a lack of preparation from students who are struggling financially and in their personal lives in a culture that does not value reading and writing in a meaningful way. Because our department is so large, we have difficulties ensuring quality across all courses, methods of delivery, and philosophies of teaching. Some of these barriers are difficult to avoid based on the size and scope of our department and the philosophical and pedagogical diversity of our instructors. However, enhanced communication and more time dedicated to these activities could be created by administration as well as faculty.

DATA ANALYSIS FOR ACADEMIC DISCIPLINES Please complete for **each course** reviewed in the Academic Discipline. Provide the most recent 5 year longitudinal data available.					
ACADEMIC DISCIPLINE AREA	English				
COURSE TITLE	ENG 101 First-Year Composition I				
COURSE DESCRIPTION	This course focuses on the writing and revising of expository essays and writing projects and is the first in a two-course sequence. It concentrates on the writing process, identifying and responding to different audiences and rhetorical situations, and understanding the conventions of format and structure in various discourse communities, including academic writing. Practice in critical thinking and essay development is emphasized.				
	YEAR 1 (2013)	*YEAR 2 (2014)*	*YEAR 3 (2015)*	*YEAR 4 (2016)*	*YEAR 5 (2017)*
NUMBER OF STUDENTS ENROLLED	2478	2331	2345	2245	2106
CREDIT HOURS PRODUCED	7887	7341	7416	7155	6690
SUCCESS RATE (% C OR BETTER) AT THE END OF THE COURSE, EXCLUDING WITHDRAWALS AND AUDIT STUDENTS	85%	85%	83%	83%	80%
IAI STATUS (LIST CODE) OR FORM 13 STATUS (LIST SIGNATURE DATES AND INSTITUTIONS)	IAI: C1 900				

DATA ANALYSIS FOR ACADEMIC DISCIPLINES Please complete for **each course** reviewed in the Academic Discipline. Provide the most recent 5 year longitudinal data available.	
ACADEMIC DISCIPLINE AREA	English
COURSE TITLE	ENG 102 First Year Composition II
COURSE DESCRIPTION	This course focuses on the writing, researching and revising of expository essays and writing projects. The second of a two-course sequence, it concentrates on the writing process, identifying and responding to different

	audiences and rhetorical contexts, and understanding the conventions of format and structure in various discourse communities, including academic writing. Practice in critical thinking and essay development is emphasized. Students write analytical and argumentative essays, including an academic research paper.				
	Year 1 (2013)	*Year 2 (2014)*	*Year 3 (2015)*	*Year 4 (2016)*	*Year 5 (2017)*
Number of Students Enrolled	2061	2030	2014	1937	1951
Credit Hours Produced	6438	6408	6297	6075	6153
Success Rate (% C or better) at the end of the course, excluding Withdrawals and Audit students	86%	88%	87%	87%	86%
IAI Status (list code) or Form 13 Status (list signature dates and institutions)	IAI: C1 901R				

Data Analysis for Academic Disciplines Please complete for **each course** reviewed in the Academic Discipline. Provide the most recent 5 year longitudinal data available.					
Academic Discipline Area	English				
Course Title	ENG 151 Foundations of Written Business Communication				
Course Description	This basic communications course for the occupational or technical student is intended to improve the student's communications skills, with major emphasis on writing more effectively for business and industry. This class is intended for students with little experience in professional writing.				
	Year 1 (2013)	*Year 2 (2014)*	*Year 3 (2015)*	*Year 4 (2016)*	*Year 5 (2017)*
Number of Students Enrolled	31	31	20		
Credit Hours Produced	93	93	60		
Success Rate (% C or better) at the end of the course, excluding Withdrawals and Audit students	89%	86%	88%		

IAI Status (list code) or Form 13 Status (list signature dates and institutions)	Form 13 Status: Transfer Accepted Western Illinois: Elective Credit (6/9/2000) Southern Illinois University: Elective Credit (3/30/2000) Northern Illinois: Elective Credit ENGEL (10/8/1999) Illinois State: Non-Major Elective (3/20/2000)

Data Analysis for Academic Disciplines Please complete for **each course** reviewed in the Academic Discipline. Provide the most recent 5 year longitudinal data available.					
Academic Discipline Area	English				
Course Title	ENG 152 Business Communication				
Course Description	This basic communication course for the occupational or technical student is intended to improve the student's written communication skills, with major emphasis on writing business correspondence more effectively for business and industry.				
	Year 1 (2013)	*Year 2 (2014)*	*Year 3 (2015)*	*Year 4 (2016)*	*Year 5 (2017)*
Number of Students Enrolled	19	25	23	43	47
Credit Hours Produced	57	75	69	135	141
Success Rate (% C or better) at the end of the course, excluding Withdrawals and Audit students	100%	76%	95%	92%	93%
IAI Status (list code) or Form 13 Status (list signature dates and institutions)	Form 13 Status: Transfer Accepted Eastern Illinois University: Elective Credit (6/18/18) Northern Illinois University: General Elective ENGL 100TR (6/18/18)				

	Western Illinois: ISELEC (6/18/18) Southern Illinois: General elective 100 level GENL1XX, IMS103 (6/18/18)

DATA ANALYSIS FOR ACADEMIC DISCIPLINES Please complete for **each course** reviewed in the Academic Discipline. Provide the most recent 5 year longitudinal data available.					
ACADEMIC DISCIPLINE AREA	English				
COURSE TITLE	ENG 153 Technical Writing				
COURSE DESCRIPTION	This course emphasizes technical writing basics, including defining an audience, understanding style and format, using graphic elements and visual aids, evaluating purpose and format and document handling with business ethics in mind. Students develop business-related documents such as proposals, reports, user manuals, and technical brochures. Sentence-level mechanics, conciseness, paragraph structure, organization, and language precision are addressed. Collaboration and revision are emphasized.				
	YEAR 1 (2013)	*YEAR 2 (2014)*	*YEAR 3 (2015)*	*YEAR 4 (2016)*	*YEAR 5 (2017)*
NUMBER OF STUDENTS ENROLLED	38	34	35	47	45
CREDIT HOURS PRODUCED	114	102	108	141	141
SUCCESS RATE (% C OR BETTER) AT THE END OF THE COURSE, EXCLUDING WITHDRAWALS AND AUDIT STUDENTS	79%	83%	76%	92%	79%
IAI STATUS (LIST CODE) OR FORM 13 STATUS (LIST SIGNATURE DATES AND INSTITUTIONS)	Form 13 Status: Transfer Credit Accepted Illinois State: Major Elective ENGMJEL (6/18/18) Western Illinois: General Elective GENELEC (6/18/18) Southern Illinois: General Elective-100 level (6/18/18) Northern Illinois: General Elective ENGL100TR (6/18/18) Eastern Illinois: Elective credit CTE0000 (6/18/18)				

DATA ANALYSIS FOR ACADEMIC DISCIPLINES Please complete for **each course** reviewed in the Academic Discipline. Provide the most recent 5 year longitudinal data available.					
ACADEMIC DISCIPLINE AREA	English				
COURSE TITLE	ENG 204 Creative Writing: Fiction				
COURSE DESCRIPTION	This course provides guided practice in writing fiction, with emphasis on the structure, elements and skills common to creative expression in fiction. It is designed to help students discover and develop their own best medium for expression.				
	YEAR 1 (2013)	*YEAR 2 (2014)*	*YEAR 3 (2015)*	*YEAR 4 (2016)*	*YEAR 5 (2017)*
NUMBER OF STUDENTS ENROLLED	42	36	34	27	35
CREDIT HOURS PRODUCED	129	108	102	81	108
SUCCESS RATE (% C OR BETTER) AT THE END OF THE COURSE, EXCLUDING WITHDRAWALS AND AUDIT STUDENTS	82%	94%	82%	84%	82%
IAI STATUS (LIST CODE) OR FORM 13 STATUS (LIST SIGNATURE DATES AND INSTITUTIONS)	Form 13 Status: Transfer Credit Accepted Western Illinois University: English Elective (9/18/2007) University of Illinois-Chicago: CW104 Introductory Narrative Writing (3/25/2008) Southern Illinois University-Carbondale: ENGL119 Core Curriculum Course (3/20/2008) Northern Illinois University: English Elective (9/18/2007) Illinois State University: English Major Elective (9/25/2007) Eastern Illinois University English Elective (8/31/2007)				

DATA ANALYSIS FOR ACADEMIC DISCIPLINES Please complete for **each course** reviewed in the Academic Discipline. Provide the most recent 5 year longitudinal data available.					
ACADEMIC DISCIPLINE AREA	English				
COURSE TITLE	ENG 205 Creative Writing: Poetry				
COURSE DESCRIPTION	This course offers practice and guidance in the writing of poetry with emphases on fundamental elements of image, trope, metaphor, voice, line, diction, syntax, and rhythm. Students will read and write lyric, narrative, and dramatic poems and work toward discovering and developing their own voices in a collaborative, workshop setting. Students will also read poetry by established poets.				
	YEAR 1 (2013)	*YEAR 2 (2014)*	*YEAR 3 (2015)*	*YEAR 4 (2016)*	*YEAR 5 (2017)*
NUMBER OF STUDENTS ENROLLED		10			17
CREDIT HOURS PRODUCED		30			51
SUCCESS RATE (% C OR BETTER) AT THE END OF THE COURSE, EXCLUDING WITHDRAWALS AND AUDIT STUDENTS		100%			100%
IAI STATUS (LIST CODE) OR FORM 13 STATUS (LIST SIGNATURE DATES AND INSTITUTIONS)	Form 13 Status: Transfer Credit Accepted Western Illinois University: English Elective (9/18/2007) University of Illinois-Chicago: CW 106, Introductory Poetry Writing (3/25/2008) Southern Illinois University – Carbondale: ENGL 119 Core Curriculum Course (3/20/2008) Northern Illinois University: English Elective (9/18/2007) Illinois State University: English Major Elective (9/25/2007) Eastern Illinois University: English Elective (8/31/2007)				

DATA ANALYSIS FOR ACADEMIC DISCIPLINES Please complete for **each course** reviewed in the Academic Discipline. Provide the most recent 5 year longitudinal data available.

ACADEMIC DISCIPLINE AREA	English				
COURSE TITLE	ENG 206 Creative Writing: Non-Fiction				
COURSE DESCRIPTION	This course provides guided practice in writing creative non-fiction, with emphasis on the structure, elements, and skills common to creative expression in non-fiction. It is designed to help students discover and develop their own stories and research into fully developed narratives about the world around them.				
	YEAR 1 (2013)	*YEAR 2 (2014)*	*YEAR 3 (2015)*	*YEAR 4 (2016)*	*YEAR 5 (2017)*
NUMBER OF STUDENTS ENROLLED		10	19	7	
CREDIT HOURS PRODUCED		30	57	21	
SUCCESS RATE (% C OR BETTER) AT THE END OF THE COURSE, EXCLUDING WITHDRAWALS AND AUDIT STUDENTS		90%	94%	86%	
IAI STATUS (LIST CODE) OR FORM 13 STATUS (LIST SIGNATURE DATES AND INSTITUTIONS)	Form 13 Status: Transfer Credit Accepted Western Illinois University: ENG 387 (10/28/2011) University of Illinois-Chicago: CW 208, Creative Nonfiction Writing (01/04/2012) Southern Illinois University - Carbondale General Elective (11/17/2011) Northern Illinois University: General Elective (01/02/2012) Illinois State University: English Major Elective (11/30/2011) Eastern Illinois University: English Elective (11/07/2011)				

DATA ANALYSIS FOR ACADEMIC DISCIPLINES Please complete for **each course** reviewed in the Academic Discipline. Provide the most recent 5 year longitudinal data available.	
ACADEMIC DISCIPLINE AREA	English
COURSE TITLE	ENG 211 American Literature to 1865

COURSE DESCRIPTION	This course is a survey of representative works illustrating the development of American literature from its beginnings to the Civil War, with an emphasis on major literary movements understood in relation to their intellectual, social, and political contexts.				
	YEAR 1 (2013)	*YEAR 2 (2014)*	*YEAR 3 (2015)*	*YEAR 4 (2016)*	*YEAR 5 (2017)*
NUMBER OF STUDENTS ENROLLED	17	19	9	12	18
CREDIT HOURS PRODUCED	51	57	27	36	54
SUCCESS RATE (% C OR BETTER) AT THE END OF THE COURSE, EXCLUDING WITHDRAWALS AND AUDIT STUDENTS	100%	100%	100%	90%	94%
IAI STATUS (LIST CODE) OR FORM 13 STATUS (LIST SIGNATURE DATES AND INSTITUTIONS)	IAI: H3 914				

DATA ANALYSIS FOR ACADEMIC DISCIPLINES Please complete for **each course** reviewed in the Academic Discipline. Provide the most recent 5 year longitudinal data available.					
ACADEMIC DISCIPLINE AREA	English				
COURSE TITLE	ENG 212 American Literature From 1865				
COURSE DESCRIPTION	This course explores writings in the United States from the end of the Civil War to the present with emphases on major literary movements, such as Realism, Naturalism, Modernism, Postmodernism and Multiculturalism, understood in relation to their intellectual, social and political contexts.				
	YEAR 1 (2013)	*YEAR 2 (2014)*	*YEAR 3 (2015)*	*YEAR 4 (2016)*	*YEAR 5 (2017)*
NUMBER OF STUDENTS ENROLLED	14	32	12	11	
CREDIT HOURS PRODUCED	42	96	36	33	
SUCCESS RATE (% C OR BETTER) AT THE END OF THE COURSE, EXCLUDING WITHDRAWALS AND AUDIT STUDENTS	93%	87%	92%	100%	

IAI Status (list code) or Form 13 Status (list signature dates and institutions)	IAI: H3 915

Data Analysis for Academic Disciplines Please complete for **each course** reviewed in the Academic Discipline. Provide the most recent 5 year longitudinal data available.					
Academic Discipline Area	English				
Course Title	ENG 215 Masterpieces of American Literature				
Course Description	This course emphasizes the development and treatment of major themes and ideas in the works of significant American authors. Such representative writers as Bradford Edwards, Franklin, Hawthorne, Poe, Melville, Emerson, Thoreau, Twain, James, Dickinson, Faulkner, Hemingway, Steinbeck and others are read. Understanding and enjoyment of the assigned readings are emphasized along with historical and sociological contexts.				
	Year 1 (2013)	*Year 2 (2014)*	*Year 3 (2015)*	*Year 4 (2016)*	*Year 5 (2017)*
Number of Students Enrolled	22	22	17		26
Credit Hours Produced	66	69	51		78
Success Rate (% C or better) at the end of the course, excluding Withdrawals and Audit students	94%	71%	93%		92%
IAI Status (list code) or Form 13 Status (list signature dates and institutions)	IAI: H3 915				

Data Analysis for Academic Disciplines Please complete for **each course** reviewed in the Academic Discipline. Provide the most recent 5 year longitudinal data available.	
Academic Discipline Area	English

COURSE TITLE	ENG 220 Multicultural Literatures of the United States				
COURSE DESCRIPTION	This course is an introduction to multicultural literary works of the United States, with emphases on novels, autobiographies, poetry, short stories, drama, memoir, essays, journals and other literary genres. This course requires students to read and understand a variety of texts in order to explore issues of race, ethnicity, class, caste, gender, sex, sexuality, nation, region, disability, age and ecosystem, along with history, formal dynamics and the personal as political.				
	YEAR 1 (2013)	*YEAR 2 (2014)*	*YEAR 3 (2015)*	*YEAR 4 (2016)*	*YEAR 5 (2017)*
NUMBER OF STUDENTS ENROLLED	19	23	25	25	26
CREDIT HOURS PRODUCED	57	69	75	75	78
SUCCESS RATE (% C OR BETTER) AT THE END OF THE COURSE, EXCLUDING WITHDRAWALS AND AUDIT STUDENTS	100%	100%	100%	100%	100%
IAI STATUS (LIST CODE) OR FORM 13 STATUS (LIST SIGNATURE DATES AND INSTITUTIONS)	IAI: H3 910D				

DATA ANALYSIS FOR ACADEMIC DISCIPLINES Please complete for **each course** reviewed in the Academic Discipline. Provide the most recent 5 year longitudinal data available.					
ACADEMIC DISCIPLINE AREA	English				
COURSE TITLE	ENG 221 British Literature to 1800				
COURSE DESCRIPTION	This course is a chronological study of British masterpieces from Beowulf through the pre- Romantics. The history of ideas may be studied to show the relationship between an idea and its literary embodiments. Critical analysis skills are required.				
	YEAR 1 (2013)	*YEAR 2 (2014)*	*YEAR 3 (2015)*	*YEAR 4 (2016)*	*YEAR 5 (2017)*
NUMBER OF STUDENTS ENROLLED	17	23	14	15	27
CREDIT HOURS PRODUCED	51	69	42	45	81
SUCCESS RATE (% C OR BETTER) AT THE END OF THE COURSE, EXCLUDING	94%	60%	75%	69%	76%

Withdrawals and Audit students					
IAI Status (list code) or Form 13 Status (list signature dates and institutions)	IAI: H3 912				

Data Analysis for Academic Disciplines Please complete for **each course** reviewed in the Academic Discipline. Provide the most recent 5 year longitudinal data available.					
Academic Discipline Area	English				
Course Title	ENG 222 British Literature From 1800				
Course Description	This course is a chronological study of the evolving world of British literature. Major works of poetry, drama and fiction from the Romantic, Victorian, Modern and contemporary periods are studied. Students will forge connections between authors, works, eras and genres through critical analysis and synthesis.				
	Year 1 (2013)	*Year 2 (2014)*	*Year 3 (2015)*	*Year 4 (2016)*	*Year 5 (2017)*
Number of Students Enrolled		13	25	20	
Credit Hours Produced		39	75	60	
Success Rate (% C or better) at the end of the course, excluding Withdrawals and Audit students		100%	100%	93%	
IAI Status (list code) or Form 13 Status (list signature dates and institutions)	IAI: H3 913				

Data Analysis for Academic Disciplines Please complete for **each course** reviewed in the Academic Discipline. Provide the most recent 5 year longitudinal data available.	
Academic Discipline Area	English
Course Title	ENG 225 Masterpieces of British Literature

COURSE DESCRIPTION	This course emphasizes the major themes, ideas and eras of British literature. Selections include Shakespeare, Milton, Swift, the Romantic, Victorian and Modern eras, and contemporary British literature. Understanding and enjoyment of the assigned readings is emphasized along with historical and sociological contexts.				
	YEAR 1 (2013)	*YEAR 2 (2014)*	*YEAR 3 (2015)*	*YEAR 4 (2016)*	*YEAR 5 (2017)*
NUMBER OF STUDENTS ENROLLED					21
CREDIT HOURS PRODUCED					63
SUCCESS RATE (% C OR BETTER) AT THE END OF THE COURSE, EXCLUDING WITHDRAWALS AND AUDIT STUDENTS					100%
IAI STATUS (LIST CODE) OR FORM 13 STATUS (LIST SIGNATURE DATES AND INSTITUTIONS)	IAI: H3 913				

DATA ANALYSIS FOR ACADEMIC DISCIPLINES Please complete for **each course** reviewed in the Academic Discipline. Provide the most recent 5 year longitudinal data available.					
ACADEMIC DISCIPLINE AREA	English				
COURSE TITLE	ENG 226 Introduction to Shakespeare				
COURSE DESCRIPTION	This course is an introduction of the works of Shakespeare for understanding and enjoyment through a study and analysis of representative plays.				
	YEAR 1 (2013)	*YEAR 2 (2014)*	*YEAR 3 (2015)*	*YEAR 4 (2016)*	*YEAR 5 (2017)*
NUMBER OF STUDENTS ENROLLED	22	8	12	10	12
CREDIT HOURS PRODUCED	66	24	36	30	36
SUCCESS RATE (% C OR BETTER) AT THE END OF THE COURSE, EXCLUDING WITHDRAWALS AND AUDIT STUDENTS	95%	83%	100%	78%	100%
IAI STATUS (LIST CODE) OR FORM 13 STATUS (LIST SIGNATURE DATES AND	IAI: H3 905				

INSTITUTIONS)	

DATA ANALYSIS FOR ACADEMIC DISCIPLINES Please complete for **each course** reviewed in the Academic Discipline. Provide the most recent 5 year longitudinal data available.					
ACADEMIC DISCIPLINE AREA	English				
COURSE TITLE	ENG 228 Children's Literature				
COURSE DESCRIPTION	Children's Literature introduces the students to the major genres of children's books, both in print and digital formats. The class focuses on authors, illustrators and trends in children's literature for emerging readers through middle school students. The impact of popular culture, caregiver and educator influence and societal trends on children's literature and literacy development will be investigated. Selection of age and reading level appropriate materials, introducing children to books, and storytelling are also emphasized.				
	YEAR 1 (2013)	*YEAR 2 (2014)*	*YEAR 3 (2015)*	*YEAR 4 (2016)*	*YEAR 5 (2017)*
NUMBER OF STUDENTS ENROLLED	15	21	15	21	14
CREDIT HOURS PRODUCED	45	63	45	63	42
SUCCESS RATE (% C OR BETTER) AT THE END OF THE COURSE, EXCLUDING WITHDRAWALS AND AUDIT STUDENTS	100%	100%	100%	95%	100%
IAI STATUS (LIST CODE) OR FORM 13 STATUS (LIST SIGNATURE DATES AND INSTITUTIONS)	IAI: H3 918				

DATA ANALYSIS FOR ACADEMIC DISCIPLINES Please complete for **each course** reviewed in the Academic Discipline. Provide the most recent 5 year longitudinal data available.					
ACADEMIC DISCIPLINE AREA	English				
COURSE TITLE	ENG 229 Introduction to Literature				
COURSE DESCRIPTION	This course is an introduction to fiction (short story and novellas or novels), poetry and drama from classic to contemporary selections. This course includes study of literary techniques and thematic interpretations of the works read.				
	YEAR 1 (2013)	*YEAR 2 (2014)*	*YEAR 3 (2015)*	*YEAR 4 (2016)*	*YEAR 5 (2017)*
NUMBER OF STUDENTS ENROLLED	13	13		13	12
CREDIT HOURS PRODUCED	39	39		39	36
SUCCESS RATE (% C OR BETTER) AT THE END OF THE COURSE, EXCLUDING WITHDRAWALS AND AUDIT STUDENTS	92%	91%		58%	100%
IAI STATUS (LIST CODE) OR FORM 13 STATUS (LIST SIGNATURE DATES AND INSTITUTIONS)	IAI: H3 900				

DATA ANALYSIS FOR ACADEMIC DISCIPLINES Please complete for **each course** reviewed in the Academic Discipline. Provide the most recent 5 year longitudinal data available.					
ACADEMIC DISCIPLINE AREA	English				
COURSE TITLE	ENG 230 Introduction to Poetry				
COURSE DESCRIPTION	This course is a critical study of world poetry with respect to structure and content through close reading of poems in a variety of styles from the Renaissance to recent times.				
	YEAR 1 (2013)	*YEAR 2 (2014)*	*YEAR 3 (2015)*	*YEAR 4 (2016)*	*YEAR 5 (2017)*
NUMBER OF STUDENTS ENROLLED		10		11	13
CREDIT HOURS PRODUCED		30		33	39

Success Rate (% C or better) at the end of the course, excluding Withdrawals and Audit students		88%		90%	75%
IAI Status (list code) or Form 13 Status (list signature dates and institutions)	IAI: H3 903				

Data Analysis for Academic Disciplines Please complete for **each course** reviewed in the Academic Discipline. Provide the most recent 5 year longitudinal data available.					
Academic Discipline Area	English				
Course Title	ENG 240 Introduction to Drama as Literature				
Course Description	This course explores the literary aspects, concepts and principles of drama. It includes the critical study of various types of plays from a variety of periods. Consideration is given to the technical aspects of dramatic production, as well as backgrounds of the physical theatre, historical development of the drama form and selected authors.				
	Year 1 (2013)	*Year 2 (2014)*	*Year 3 (2015)*	*Year 4 (2016)*	*Year 5 (2017)*
Number of Students Enrolled				15	
Credit Hours Produced				45	
Success Rate (% C or better) at the end of the course, excluding Withdrawals and Audit students				93%	
IAI Status (list code) or Form 13 Status (list signature dates and institutions)	IAI: H3 902				

DATA ANALYSIS FOR ACADEMIC DISCIPLINES Please complete for **each course** reviewed in the Academic Discipline. Provide the most recent 5 year longitudinal data available.					
ACADEMIC DISCIPLINE AREA	English				
COURSE TITLE	ENG 245 World Literature				
COURSE DESCRIPTION	This course is a survey of representative readings from ancient times to the present. The course emphasizes the significance of the selections as human documents as well as their importance as literature. Although this course focuses primarily upon Western literature, representative texts from other cultures may be integrated into the syllabus. A cross selection of literary genre ranging from Greek and Roman epics to modern plays, love sonnets and modern short stories constitutes the course reading list.				
	YEAR 1 (2013)	*YEAR 2 (2014)*	*YEAR 3 (2015)*	*YEAR 4 (2016)*	*YEAR 5 (2017)*
NUMBER OF STUDENTS ENROLLED	19	15	16	10	10
CREDIT HOURS PRODUCED	57	45	48	30	30
SUCCESS RATE (% C OR BETTER) AT THE END OF THE COURSE, EXCLUDING WITHDRAWALS AND AUDIT STUDENTS	84%	86%	73%	78%	80%
IAI STATUS (LIST CODE) OR FORM 13 STATUS (LIST SIGNATURE DATES AND INSTITUTIONS)	IAI: H3 906				

DATA ANALYSIS FOR ACADEMIC DISCIPLINES Please complete for **each course** reviewed in the Academic Discipline. Provide the most recent 5 year longitudinal data available.	
ACADEMIC DISCIPLINE AREA	English
COURSE TITLE	ENG 255 Women's Literature
COURSE DESCRIPTION	This course introduces students to novels, short stories, poetry, essays, memoir, drama, journals and other literary genre written by women in English across several centuries and from a variety of racial, ethnic, sexual, class, disability, age, regional and national backgrounds. Students explore how systems of race, ethnicity, class, caste, gender, sex, sexuality, disability, age, region, nation and ecosystem affect the conditions under which women write as well as what they write. Students also explore differences and continuities in women writers' perspectives and their uses of form, content

	and subject.				
	Year 1 (2013)	*Year 2 (2014)*	*Year 3 (2015)*	*Year 4 (2016)*	*Year 5 (2017)*
Number of Students Enrolled	25	26	25	22	24
Credit Hours Produced	75	78	75	66	72
Success Rate (% C or better) at the end of the course, excluding Withdrawals and Audit students	96%	96%	100%	100%	100%
IAI Status (list code) or Form 13 Status (list signature dates and institutions)	IAI: H3 911D				

Data Analysis for Academic Disciplines Please complete for **each course** reviewed in the Academic Discipline. Provide the most recent 5 year longitudinal data available.					
Academic Discipline Area	English				
Course Title	ENG 265 Latina and Latino Literature				
Course Description	Latina and Latino Literature introduces students to major Latina and Latino writings in English in the United States. The course focuses on the primary works, authors and trends in Latina/o literature. Students read texts in a variety of genres--fiction, drama, essays, poetry, memoir, etc. Authors include, but are not limited to, those with roots in Cuba, the Dominican Republic, Mexico, Puerto Rico and throughout South, Central and North Americas.				
	Year 1 (2013)	*Year 2 (2014)*	*Year 3 (2015)*	*Year 4 (2016)*	*Year 5 (2017)*
Number of Students Enrolled	13	11	7		
Credit Hours Produced	39	33	21		
Success Rate (% C or better) at the end of the course, excluding Withdrawals and Audit students	100%	100%	100%		

IAI Status (list code) or Form 13 Status (list signature dates and institutions)	Form 13 Status: Transfer Credit Accepted Western Illinois University: ENG 357 (4/27/2010) University of Illinois-Chicago: Lower level Latina/Latino studies elective (12/10/2010) Southern Illinois University – Carbondale: Humanities General Elective (04/29/2010) Northern Illinois University: General Elective (05/05/2010) Illinois State University: English Major Elective (05/20/2010) Eastern Illinois University: English Elective (04/21/2010)

Data Analysis for Academic Disciplines Please complete for **each course** reviewed in the Academic Discipline. Provide the most recent 5 year longitudinal data available.					
Academic Discipline Area	English				
Course Title	ENG 296 Special Topics in Literature				
Course Description	This course offers in-depth exploration of a special topic, issue or trend in literature. Repeatable to a maximum of 16 semester hours for different special topics; 6 semester hours may apply to a degree or certificate.				
	Year 1 (2013)	*Year 2 (2014)*	*Year 3 (2015)*	*Year 4 (2016)*	*Year 5 (2017)*
Number of Students Enrolled	1	1	1	2	3
Credit Hours Produced	3	1	3	2	5
Success Rate (% C or better) at the end of the course, excluding Withdrawals and Audit students		100%	100%	100%	100%
IAI Status (list code) or Form 13 Status (list signature dates and institutions)	Form 13 Status: Transfer Credit Accepted Western Illinois University: English Elective (11/22/1999) Southern Illinois University – Carbondale: General Elective (09/14/1998) Northern Illinois University ENG 298 (12/03/1998)				

	Illinois State University: English Non-Major Elective (10/13/1998) Eastern Illinois University English Elective (09/21/1998)

How does the data support the course goals? Elaborate.	Waubonsee has not determined individual course goals. Our current goals are based on total credit enrollment. We are currently defining program/discipline goals as part of our continuous improvement process. Beginning fall 2018 we will implement program/discipline admissions goals.
What disaggregated data was reviewed?	Data reviewed was retrieved from the Banner Student System. Disaggregated data reviewed included unduplicated enrollment in English courses by race, gender and age.
Were there identifiable gaps in the data? Please explain.	The data showed that enrollment in our English courses at Waubonsee were aligned with our total College population and our district population.
Academic Course Review Results	
Intended Action Steps Please detail action steps to be completed in the future based on this review with a timeline and/or anticipated dates.	Reduce D, F, and W grades in First Year Composition courses by identifying at-risk population groups and strategizing how to better help those students complete the sequence. Date anticipated May 2019. Review data for the pilot ENG101 co-requisite ENG099 Supplemental First Year Composition I courses to determine student success. Date anticipated June 2019.
Rationale Provide a brief summary of the review findings and a rationale for any future modifications.	The English curriculum gives students a vast array of different types of courses to choose from. All transfer degree-seeking students take ENG101 and ENG102 to be applied their degree. CTE degree-seeking students take ENG152 and ENG153 to be applied their degree. All four courses are offered in traditional and online formats. Students have a wide variety of literature courses to choose from based on their interests. All literature courses that transfer to four-year institutions are IAI courses. Students intending to transfer as English majors can consider taking major courses ENG221, ENG222, ENG211 and ENG212. Students also have the option of taking creative writing courses to enhance their curriculum.
Resources Needed	The department would greatly benefit from a faculty writing program coordinator, if not a department chair. This department has great stability in the faculty, but relatively frequent turnover in administration. The department would benefit from more long-term and specialized leadership. More full-time faculty. Over 60% of our English classes are taught by part-time instructors. More resources for a writing tutorial center at all campuses with extended hours would also improve the implementation of the discipline. Computer labs in Bodie Hall.
Responsibility Who is responsible for	The Dean for Communications, Humanities and Arts along with the English faculty are responsible for implementing the modifications in

completing or implementing the modifications?	this Program Review.

Academic Disciplines	
College Name:	Waubonsee Community College
Fiscal Year in Review:	2017-2018
Discipline Area:	**Mathematics**
Review Summary Complete this section to review the Academic Discipline as a whole. Use the Course Specific Review portion of this template for each course reviewed in the Discipline.	
Program Objectives What are the objectives/goals of the discipline?	1. Use logical reasoning and mathematical principles to solve problems. 2. Interpret information and reasoning expressed mathematically (symbols, tables, graphs, formulas, etc.) 3. Communicate mathematical information effectively.
To what extent are these objectives being achieved?	We are in the process of implementing course outcomes. Assessment of course outcomes began in Spring 2018 and each course will be assessed once every five years. In most cases, standardized problems will be embedded in exams in each course.
How does this discipline contribute to other fields and the mission of the college?	One of the college's learning outcomes is Quantitative Literacy; our department is at the center of this outcome. All A.S. and A.A. degrees require a mathematics course. The science and engineering disciplines rely heavily on the mathematics department to prepare students for their courses.
Prior Review Update Describe any quality improvements or modifications made since the last review period.	Major curriculum changes in the algebra pathways were implemented in the fall, 2017 semester. The faculty used college data and patterns from other colleges to determine a need to have a "liberal arts" algebra pathway and a STEM algebra pathway. Courses were totally revised and new textbooks selected. (See Addendum at the end of this report for additional information)
Review Analysis Complete the following fields and provide concise information where applicable. Please do not insert data sets but summarize the data to completely answer the questions. The review will be sent back if any of the below fields are left empty or inadequate information is provided.	
Indicator 1: Need	**Response**

1.1 What mechanisms are in place to determine programmatic needs/changes for AA, AS, AFA, and AES academic programs? How are programmatic needs/changes evaluated by the curriculum review committee and campus academic leadership?	Several processes are in place to determine programmatic needs and changes for the AA, AS, AFA and AES academic programs. Faculty participate in state and national organizations meeting several times a year and learn about trends and changes in curriculum. Faculty are also active in statewide initiatives such as the Illinois Articulation Initiative (IAI), which are key resources for staying current. Each academic division is also assigned a specific counselor as a mechanism to gather student feedback and changes coming from transfer institutions. Faculty then collaborate with their deans on curricular changes that address discipline needs. The dean and faculty will also study data provided by the college's Institutional Effectiveness Department as well as the data gathered from the professional math organizations and transfer institutions. All proposed changes are reviewed by the college's Curriculum Council. A checklist is in place to be completed prior to a council submission. The checklist was designed to encourage originators to have discussions with a variety of departments on campus to provide an opportunity for additional feedback related to the intended change. The discussions also serve as a way to evaluate needs. Curriculum Council meets twice per month in the fall and once a month in the spring semester, and is comprised of program faculty, academic deans and other staff directly involved in curriculum. The Council is chaired by the Vice President of Educational Affairs (VPEA). Additional programmatic discussions make up a part of the Curriculum Council meetings. Through a formal process, faculty approve changes or make recommendations for additional revisions. All submitted changes are approved by the Vice President of Educational Affairs.
1.2 How are students informed or recruited for this program?	Students will be informed and recruited for this discipline in their high schools, at the Career Pathways events, tours of the campuses, and through advertising. Faculty also participate in recruiting events such as the annual College Night, the annual Exploring Majors Fair, and college open houses. Faculty-sponsored student math clubs and a mathematics honor society are also useful to recruit and inform students.
INDICATOR 2: COST EFFECTIVENESS	***RESPONSE***
2.1 What are the costs associated with this discipline?	The direct costs associated with the program include: • Faculty salary and benefits (full-time and part-time) • Instructional supplies • Technology, software and services • Publications and dues • Full-time faculty professional development
2.2 What steps can be taken to offer curricula more cost-effectively?	The instructional cost associated with this program is $1535.50 per load hour which is 23% less than the institutional average of $2002.00 per load hour.

2.3 Is there a need for additional resources?	The college pays for this program and its costs through tuition and fees.
INDICATOR 3: QUALITY	***RESPONSE***
3.1 Are there any alternative delivery methods of this discipline? (e.g. online, flexible-scheduling, accelerated, team teaching, etc.)?	In addition to the traditional face-to-face, Monday—Thursday classes, math classes are also offered at night and on weekends (Fridays and Saturdays). Courses are taught on all four campuses and through different modalities, including online, emporium model, and traditional lecture. A co-requisite pairing of a developmental math class and Basic Statistics (transfer credit) will be offered in the fall, 2018. In the future, we would like to offer hybrid sections of some courses to help with scheduling challenges and enrollment.
3.2 If the college delivers the course in more than one method, does the college compare success rates of each delivery method? If so, how?	While we are collecting data this year to determine student learning, and while this data will show the withdrawal and failure rates, we are not yet reviewing or comparing the success rate of each delivery method.
3.3 What assessments does the discipline use to measure full-time and adjunct instructor performance in the classroom?	Classroom observations and student evaluations are the primary tools for measuring instructor performance. Students anonymously evaluate their instructors at the end of every semester. The academic deans and faculty see these after the grades have been recorded. Student evaluations are excellent tools that all faculty members use to evaluate the effectiveness of their courses. Faculty also make it a practice to collect informal feedback regularly from students about course practices and delivery methods.
3.4 How does the discipline identify and support at-risk students?	The Access Center (for students with disabilities), TRIO Student Support Services, and the STAR program (counseling and support for athletes) identify and support at-risk students. Faculty support the recommendations of these programs. Faculty also complete Early Alert forms to connect students who are unsuccessful in class with counseling as quickly as possible each semester. We also encourage students to use campus resources including the tutoring centers and office hours. All faculty are available outside of office hours for appointments with students. The college was awarded a Title V grant that supports additional tutoring, including online tutoring, and the faculty encourage use of those programs.
3.5 To what extent is the discipline integrated with other instructional programs and services?	A number of mathematics courses are pre-requisites or co-requisites for other programs. A math course is required for all A.S. and A.A. degrees. Math faculty work closely with chemistry, physics, science, technology, engineering, CAD, and other programs since math is such an important factor in those programs. Math and engineering students are integrated in student groups like the Mathematical-Engineering Club, the Software and Tech Club, and the STEM Club.

3.6 What does the discipline or department review when developing or modifying curriculum?	In 2017, the mathematics faculty completed a huge revision of the algebra courses and pathways, as mentioned earlier. The steps they used for this are the steps they use for any development or modification of curriculum. The faculty used recommendations from professional organizations (IMACC, AMATYC) and the Illinois Articulation Initiative (IAI) as a baseline for the new curriculum. The faculty then looked at comparable peer institutions to see their solutions to curriculum challenges. Best practices from other math departments were considered. The faculty particularly focused on courses that had low success rates and were highlighted by professional organizations and peer institutions. Data from the college's Institutional Effectiveness department on such areas as student learning and grades would also be studied.
3.7 When a course has low retention and/or success rates, what is the process to address these issues?	Every semester, each faculty member receives a summary of his/her grades given—the percentage of "C's," for example—and this summary compares these percentages to the overall grades of the college. While there is currently no formal process where the dean and the faculty member review low retention or success rates, the faculty can, through the dean's office, receive more in-depth data on each of their individual courses. If there were issues, the dean would have open discussions.

LIST ANY BARRIERS ENCOUNTERED WHILE IMPLEMENTING THIS DISCIPLINE.
Our primary problem with implementing the mathematics discipline is the Accuplacer placement test. It placed a record percentage of incoming students into beginning algebra and a record low percentage into calculus. Additionally, we cannot take any actions to fix the problem by adjusting cut scores or working in advance, because our placement exam is changing to Accuplacer Next Generation, a new exam with a new format. Our colleagues at other schools have performed some studies on the new exam and they are not promising. As a result, we are unable to implement a sensible placement process into our primary sequences of courses, but placement is still under review.

DATA ANALYSIS FOR ACADEMIC DISCIPLINES

Please complete for **each course** reviewed in the Academic Discipline. Provide the most recent 5 year longitudinal data available.

ACADEMIC DISCIPLINE AREA	Mathematics				
COURSE TITLE	MTH 101 College Mathematics				
COURSE DESCRIPTION	This course in mathematics is designed to satisfy the general education requirement at the university level. The emphasis of the course is on understanding logical arguments, doing abstract thinking and solving verbal problems. Topics covered include logical statements and arguments, geometry in problem solving, estimation, approximation, judging reasonableness of answers, problem solving and statistics. *Note: A graphing calculator is strongly recommended for the course; a TI-83 is sufficient.* *Prereq: C or better in MTH067 or MTH072, or placement by assessment.*				
	YEAR 1 (2013)	*YEAR 2 (2014)*	*YEAR 3 (2015)*	*YEAR 4 (2016)*	*YEAR 5 (2017)*
NUMBER OF STUDENTS ENROLLED	531	590	564	502	515

Credit Hours Produced	1626	1806	1737	1572	1599
Success Rate (% C or better) at the end of the course, excluding Withdrawals and Audit students	83%	85%	87%	84%	78%
IAI Status (list code) or Form 13 Status (list signature dates and institutions)	M1 901				

Data Analysis for Academic Disciplines Please complete for **each course** reviewed in the Academic Discipline. Provide the most recent 5 year longitudinal data available.					
Academic Discipline Area	Mathematics				
Course Title	MTH 102 Applied Practical Math				
Course Description	This course is designed to help students develop mathematical reasoning and real-world problem solving skills. Topics covered include applications of geometry, counting techniques and probability, statistics and graph theory. *Prereq: C or better in MTH067 or MTH072, or placement by assessment.*				
	Year 1 (2013)	*Year 2 (2014)*	*Year 3 (2015)*	*Year 4 (2016)*	*Year 5 (2017)*
Number of Students Enrolled	75	78	64	85	105
Credit Hours Produced	231	234	192	261	318
Success Rate (% C or better) at the end of the course, excluding Withdrawals and Audit students	93%	96%	97%	86%	90%
IAI Status (list code) or Form 13 Status (list signature dates and institutions)					

DATA ANALYSIS FOR ACADEMIC DISCIPLINES Please complete for **each course** reviewed in the Academic Discipline. Provide the most recent 5 year longitudinal data available.					
ACADEMIC DISCIPLINE AREA	Mathematics				
COURSE TITLE	MTH 103 Technical Mathematics				
COURSE DESCRIPTION	This course, intended primarily for those students majoring in the technical-vocational areas, includes an elementary review and survey of arithmetical operations, common fractions, fundamentals of algebra, mensuration formulas and geometry.				
	YEAR 1 (2013)	*YEAR 2 (2014)*	*YEAR 3 (2015)*	*YEAR 4 (2016)*	*YEAR 5 (2017)*
NUMBER OF STUDENTS ENROLLED	57	46	58	44	79
CREDIT HOURS PRODUCED	171	138	174	141	243
SUCCESS RATE (% C OR BETTER) AT THE END OF THE COURSE, EXCLUDING WITHDRAWALS AND AUDIT STUDENTS	61%	93%	98%	81%	82%
IAI STATUS (LIST CODE) OR FORM 13 STATUS (LIST SIGNATURE DATES AND INSTITUTIONS)					

DATA ANALYSIS FOR ACADEMIC DISCIPLINES Please complete for **each course** reviewed in the Academic Discipline. Provide the most recent 5 year longitudinal data available.					
ACADEMIC DISCIPLINE AREA	Mathematics				
COURSE TITLE	MTH 104 Business Mathematics				
COURSE DESCRIPTION	Business Mathematics is a comprehensive introduction to the concepts and applications of mathematics to personal and commercial business problems. Basic arithmetic and problem solving techniques used in sales, marketing, banking, finance, accounting, consumer and other business situations are emphasized.				
	YEAR 1 (2013)	*YEAR 2 (2014)*	*YEAR 3 (2015)*	*YEAR 4 (2016)*	*YEAR 5 (2017)*
NUMBER OF STUDENTS ENROLLED	156	117	119	119	124

Credit Hours Produced	477	363	360	357	381
Success Rate (% C or better) at the end of the course, excluding Withdrawals and Audit students	91%	76%	75%	80%	78%
IAI Status (list code) or Form 13 Status (list signature dates and institutions)					

Data Analysis for Academic Disciplines Please complete for **each course** reviewed in the Academic Discipline. Provide the most recent 5 year longitudinal data available.					
Academic Discipline Area	Mathematics				
Course Title	MTH 107 Basic Statistics				
Course Description	This course in mathematics is designed to assist the student in the understanding and use of numerical data. Course content includes descriptive methods, probability, probability distributions, statistical inference, confidence intervals, tests of hypotheses, and correlation and regression.				
	Year 1 (2013)	*Year 2 (2014)*	*Year 3 (2015)*	*Year 4 (2016)*	*Year 5 (2017)*
Number of Students Enrolled	629	656	667	711	794
Credit Hours Produced	1977	2070	2106	2253	2484
Success Rate (% C or better) at the end of the course, excluding Withdrawals and Audit students	86%	80%	84%	86%	84%
IAI Status (list code) or Form 13 Status (list signature dates and institutions)	**M1 902**				

DATA ANALYSIS FOR ACADEMIC DISCIPLINES Please complete for **each course** reviewed in the Academic Discipline. Provide the most recent 5 year longitudinal data available.					
ACADEMIC DISCIPLINE AREA	Mathematics				
COURSE TITLE	MTH 111 College Algebra				
COURSE DESCRIPTION	This course is designed to provide the student with basic algebraic concepts necessary to continue in other mathematics courses. Topics include: real numbers, complex numbers, solutions of inequalities and equations, coordinate systems, functions, polynomials, rational functions, exponential and logarithmic functions, graphing and transformations of functions, and systems of equations.				
	YEAR 1 (2013)	*YEAR 2 (2014)*	*YEAR 3 (2015)*	*YEAR 4 (2016)*	*YEAR 5 (2017)*
NUMBER OF STUDENTS ENROLLED	802	720	790	810	710
CREDIT HOURS PRODUCED	3368	3072	3380	3444	3032
SUCCESS RATE (% C OR BETTER) AT THE END OF THE COURSE, EXCLUDING WITHDRAWALS AND AUDIT STUDENTS	81%	77%	79%	82%	82%
IAI STATUS (LIST CODE) OR FORM 13 STATUS (LIST SIGNATURE DATES AND INSTITUTIONS)	Form 13 Status: Transfer Accepted Western Illinois: Math 128 (5/11/2009) University of Illinois-Urbana Champaign Math 102 (1/04/2010) Southern Illinois University: Math 108 (5/07/2009)				

DATA ANALYSIS FOR ACADEMIC DISCIPLINES Please complete for **each course** reviewed in the Academic Discipline. Provide the most recent 5 year longitudinal data available.	
ACADEMIC DISCIPLINE AREA	Mathematics
COURSE TITLE	MTH 112 Plane Trigonometry
COURSE DESCRIPTION	This course in trigonometry of the plane concentrates on trigonometric functions and their applications. Topics covered include the trigonometric functions, solution of right triangles, radian measure, fundamental

	identities, angular measure, graphs, logarithms, functions of composite angles, oblique triangles, trigonometric equations, inverse trigonometric functions, and complex numbers, including powers and roots.				
	Year 1 (2013)	*Year 2 (2014)*	*Year 3 (2015)*	*Year 4 (2016)*	*Year 5 (2017)*
Number of Students Enrolled	270	245	232	264	254
Credit Hours Produced	849	780	753	849	843
Success Rate (% C or better) at the end of the course, excluding Withdrawals and Audit students	82%	78%	75%	81%	80%
IAI Status (list code) or Form 13 Status (list signature dates and institutions)	Form 13 Status: Transfer Accepted Western Illinois: Math 127 (6/08/2001) Illinois State University Math 108 (7/12/2001) Southern Illinois University: Math 109 (11/26/2001)				

Data Analysis for Academic Disciplines Please complete for **each course** reviewed in the Academic Discipline. Provide the most recent 5 year longitudinal data available.					
Academic Discipline Area	Mathematics				
Course Title	MTH 131 Calculus With Analytic Geometry I				
Course Description	This first course in calculus and analytic geometry covers limits and continuity, the definition of the derivative, rate of change, and slope, derivatives of polynomial, rational, trigonometric, exponential, and logarithmic functions, the chain rule, implicit differentiation, approximation by differentials, L'Hopital's Rule, higher order derivatives, Rolle's Theorem, the Mean Value Theorem, applications of derivatives, an introduction to antiderivatives and definite integrals, areas and the Fundamental Theorem of Calculus. *Prereq: C or better in MTH111 and MTH112; or C or better in MTH129 and MTH130; or C or better in MTH130 and required placement score; or placement by assessment.*				
	Year 1 (2013)	*Year 2 (2014)*	*Year 3 (2015)*	*Year 4 (2016)*	*Year 5 (2017)*
Number of Students Enrolled	244	270	208	243	248

Credit Hours Produced	1012	1168	888	1112	1084
Success Rate (% C or better) at the end of the course, excluding Withdrawals and Audit students	89%	72%	81%	83%	80%
IAI Status (list code) or Form 13 Status (list signature dates and institutions)	**M1 900-1, MTH 901**				

Data Analysis for Academic Disciplines Please complete for **each course** reviewed in the Academic Discipline. Provide the most recent 5 year longitudinal data available.					
Academic Discipline Area	Mathematics				
Course Title	MTH 132 Calculus With Analytic Geometry II				
Course Description	This second course in calculus and analytic geometry is a continuation of MTH 131. Topics covered include formal integration techniques, numerical integration, area between two curves, volumes of revolution, average value of a function, work, center of mass, improper integrals, arc length, surfaces of revolution, polar coordinates, slopes in polar coordinates, areas in polar coordinates, parametric equations, calculus with parametric equations, sequences, series, the integral test, alternating series, comparison tests, absolute convergence, ratio and root tests, power series, calculus with power series, Taylor series, and Taylor's Theorem. *Prereq: C or better in MTH131.*				
	Year 1 (2013)	*Year 2 (2014)*	*Year 3 (2015)*	*Year 4 (2016)*	*Year 5 (2017)*
Number of Students Enrolled	144	150	128	131	159
Credit Hours Produced	640	648	576	572	744
Success Rate (% C or better) at the end of the course, excluding Withdrawals and Audit students	76%	79%	84%	81%	79%
IAI Status (list code) or Form 13 Status (list signature dates and institutions)	**M1 900-2, MTH 902.**				

DATA ANALYSIS FOR ACADEMIC DISCIPLINES Please complete for **each course** reviewed in the Academic Discipline. Provide the most recent 5 year longitudinal data available.					
ACADEMIC DISCIPLINE AREA	Mathematics				
COURSE TITLE	MTH 201 Mathematics for Elementary Teachers I				
COURSE DESCRIPTION	This first course in mathematics for elementary education majors follows the curriculum standards of the National Council of Teachers of Mathematics. Topics include: problem-solving strategies, patterns and sequences, set theory, numeration systems, number theory, and operations with whole numbers, integers, rational numbers, and real numbers. Emphasis is on math content and manipulatives used to teach mathematics in grades K-8. *Prereq: C or better in MTH070 or MTH072 and MTH075; or placement by assessment.*				
	YEAR 1 (2013)	*YEAR 2 (2014)*	*YEAR 3 (2015)*	*YEAR 4 (2016)*	*YEAR 5 (2017)*
NUMBER OF STUDENTS ENROLLED	104	105	107	102	76
CREDIT HOURS PRODUCED	324	324	354	312	246
SUCCESS RATE (% C OR BETTER) AT THE END OF THE COURSE, EXCLUDING WITHDRAWALS AND AUDIT STUDENTS	92%	88%	90%	87%	86%
IAI STATUS (LIST CODE) OR FORM 13 STATUS (LIST SIGNATURE DATES AND INSTITUTIONS)	Form 13 Status: Transfer Accepted Western Illinois: Math 106 (6/08/2001) Illinois State University General Elective (7/31/2001) Southern Illinois University: Math 113 (11/26/2001)				

DATA ANALYSIS FOR ACADEMIC DISCIPLINES Please complete for **each course** reviewed in the Academic Discipline. Provide the most recent 5 year longitudinal data available.	
ACADEMIC DISCIPLINE AREA	Mathematics

COURSE TITLE	MTH 202 Mathematics for Elementary Teachers II				
COURSE DESCRIPTION	This second course in mathematics for elementary education majors follows the curriculum standards of the National Council of Teachers of Mathematics. Topics include: probability, statistics, geometry, and measurement. Emphasis is on math content and manipulatives used to teach mathematics in grades K-8. *Prereq: C or better in MTH201.*				
	YEAR 1 (2013)	*YEAR 2 (2014)*	*YEAR 3 (2015)*	*YEAR 4 (2016)*	*YEAR 5 (2017)*
NUMBER OF STUDENTS ENROLLED	97	70	64	64	62
CREDIT HOURS PRODUCED	306	219	198	207	189
SUCCESS RATE (% C OR BETTER) AT THE END OF THE COURSE, EXCLUDING WITHDRAWALS AND AUDIT STUDENTS	86%	89%	85%	87%	85%
IAI STATUS (LIST CODE) OR FORM 13 STATUS (LIST SIGNATURE DATES AND INSTITUTIONS)	**M1 903**				

DATA ANALYSIS FOR ACADEMIC DISCIPLINES Please complete for **each course** reviewed in the Academic Discipline. Provide the most recent 5 year longitudinal data available.					
ACADEMIC DISCIPLINE AREA	Mathematics				
COURSE TITLE	MTH 210 Finite Mathematics				
COURSE DESCRIPTION	This course is intended for students in business, economics, or social and life sciences with applications from these fields. Topics covered include vectors, determinants, matrices, systems of inequalities, linear programming, simplex method, sets and counting, probability theory, stochastic processes, Markov processes, difference equations, and the mathematics of finance. *Prereq: C or better in MTH109 or MTH111 or placement by assessment.*				
	YEAR 1 (2013)	*YEAR 2 (2014)*	*YEAR 3 (2015)*	*YEAR 4 (2016)*	*YEAR 5 (2017)*
NUMBER OF STUDENTS ENROLLED	67	67	63	62	68

Credit Hours Produced	207	207	192	201	210
Success Rate (% C or better) at the end of the course, excluding Withdrawals and Audit students	71%	81%	83%	76%	77%
IAI Status (list code) or Form 13 Status (list signature dates and institutions)	**M1 906**				

Data Analysis for Academic Disciplines Please complete for **each course** reviewed in the Academic Discipline. Provide the most recent 5 year longitudinal data available.					
Academic Discipline Area	Mathematics				
Course Title	MTH 211 Calculus for Business and Social Science				
Course Description	This course presents an elementary treatment of topics from differential and integral calculus. It is intended primarily for students in the fields of business and social science. The emphasis is on skill-building and on applications of calculus to the areas of business, economics, and social science. The types of functions studied include polynomials, rational, exponential, and logarithmic. Multivariable content includes applications of partial derivatives. *Prereq: C or better in MTH109 or MTH111 or placement by assessment.*				
	Year 1 (2013)	*Year 2 (2014)*	*Year 3 (2015)*	*Year 4 (2016)*	*Year 5 (2017)*
Number of Students Enrolled	264	277	278	252	247
Credit Hours Produced	849	870	867	828	822
Success Rate (% C or better) at the end of the course, excluding Withdrawals and Audit students	78%	79%	82%	75%	75%
IAI Status (list code) or Form 13 Status (list signature dates and institutions)	**M1 900**				

DATA ANALYSIS FOR ACADEMIC DISCIPLINES Please complete for **each course** reviewed in the Academic Discipline. Provide the most recent 5 year longitudinal data available.					
ACADEMIC DISCIPLINE AREA	Mathematics				
COURSE TITLE	MTH 233 Calculus With Analytic Geometry III				
COURSE DESCRIPTION	This third course in calculus and analytic geometry is a continuation of MTH132. Topics include vectors, vector-valued functions, space curves, multivariate functions, partial derivatives, differentials, directional derivatives, gradients, double and triple integrals, vector fields, line integrals, and differential equations. *Prereq: C or better in MTH132.*				
	YEAR 1 (2013)	*YEAR 2 (2014)*	*YEAR 3 (2015)*	*YEAR 4 (2016)*	*YEAR 5 (2017)*
NUMBER OF STUDENTS ENROLLED	81	50	84	74	70
CREDIT HOURS PRODUCED	328	208	348	316	308
SUCCESS RATE (% C OR BETTER) AT THE END OF THE COURSE, EXCLUDING WITHDRAWALS AND AUDIT STUDENTS	95%	96%	95%	92%	88%
IAI STATUS (LIST CODE) OR FORM 13 STATUS (LIST SIGNATURE DATES AND INSTITUTIONS)	**M1 900-3, MTH 903**				

DATA ANALYSIS FOR ACADEMIC DISCIPLINES Please complete for **each course** reviewed in the Academic Discipline. Provide the most recent 5 year longitudinal data available.	
ACADEMIC DISCIPLINE AREA	Mathematics
COURSE TITLE	MTH 236 Introduction to Linear Algebra
COURSE DESCRIPTION	This course covers basic concepts and techniques of matrix theory and linear algebra. It includes systems of linear equations, operations with matrices, inverses, determinants, vector spaces, inner product spaces, linear transformations, eigenvalues and eigenvectors. Numerical iterative

	methods are discussed and formal proof constructions are stressed. *Prereq: C or better in MTH233.*				
	Year 1 (2013)	*Year 2 (2014)*	*Year 3 (2015)*	*Year 4 (2016)*	*Year 5 (2017)*
Number of Students Enrolled	20	10	7	5	18
Credit Hours Produced	80	40	28	20	72
Success Rate (% C or better) at the end of the course, excluding Withdrawals and Audit students	89%	88%	100%	100%	100%
IAI Status (list code) or Form 13 Status (list signature dates and institutions)	**MTH 911**				

Data Analysis for Academic Disciplines Please complete for **each course** reviewed in the Academic Discipline. Provide the most recent 5 year longitudinal data available.					
Academic Discipline Area	Mathematics				
Course Title	MTH 240 Differential Equations				
Course Description	This course covers linear equations of the first order linear equations with constant coefficients; the general linear equations; variation of parameters; undetermined coefficients; linear independence; the Wronskian; exact equations; separation of variables; applications; solutions of Laplace transforms; solution by power series and partial differential equations. *Prereq: C or better in MTH233.*				
	Year 1 (2013)	*Year 2 (2014)*	*Year 3 (2015)*	*Year 4 (2016)*	*Year 5 (2017)*
Number of Students Enrolled	39	35	34	27	29
Credit Hours Produced	123	108	105	84	90
Success Rate (% C or better) at the end of the course, excluding Withdrawals and Audit students	97%	97%	88%	96%	93%

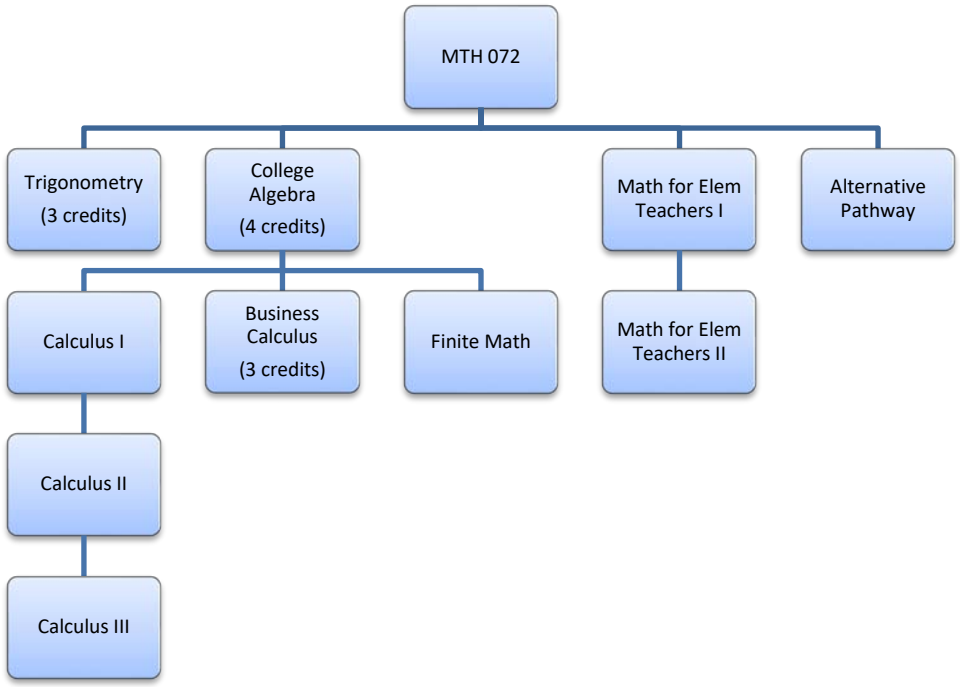
IAI STATUS (LIST CODE) OR FORM 13 STATUS (LIST SIGNATURE DATES AND INSTITUTIONS)	**MTH 912**

HOW DOES THE DATA SUPPORT THE COURSE GOALS? ELABORATE.	Waubonsee has not determined individual course goals. Our current goals are based on total credit enrollment. We are currently defining program/discipline goals as part of our continuous improvement process. Beginning fall 2018 we will implement program/discipline goals.
WHAT DISAGGREGATED DATA WAS REVIEWED?	Data reviewed was retrieved from the Banner Student System. Disaggregated data reviewed included unduplicated enrollment in mathematics courses by race, gender and age.
WERE THERE IDENTIFIABLE GAPS IN THE DATA? PLEASE EXPLAIN.	The data showed that enrollment in our mathematics courses at Waubonsee were aligned with our total College population and our district population.
ACADEMIC COURSE REVIEW RESULTS	
Intended Action Steps Please detail action steps to be completed in the future based on this review with a timeline and/or anticipated dates.	1. Collect and analyze assessment data for MTH 101 and MTH 240 by December 2018. 2. Create new assessments for MTH 131, 132, 233, and 236 by December 2018. 3. Faculty will help develop new courses with the help of our High School partners in accordance with the PWR ACT.
Rationale Provide a brief summary of the review findings and a rationale for any future modifications.	The mathematics faculty found the program review to be very instructive, since they put time into studying their procedures and accomplishments. Success rates are excellent, the new curriculum is an improvement, and assessment of student learning is going well. The faculty will continue to review open-source textbooks. Since this is the first year of collecting data on assessment of student learning, those results in December, 2018 will be studied and modifications implemented.
Resources Needed	The College has been very generous in providing a divisional budget that allows for faculty professional development and organizational memberships. The math student organizations are well supported. Resources such as math manipulatives have been purchased. The only additional resource that the faculty feels is a priority is the addition of another full-time faculty member. The current faculty feel that too many sections are taught by adjunct instructors and that there are too many projects that require a sustaining champion from the faculty.
Responsibility Who is responsible for completing or implementing the modifications?	The full-time mathematics faculty members will complete or implement modifications. The Dean of Mathematics and Sciences oversees these processes and ensures that the faculty are engaged. The Dean and Assistant Dean work with the adjunct instructors to communicate, train, and evaluate modifications as they are applied to adjuncts' work. The Dean's Office is also setting up the shared departmental Blackboard shells, but faculty will contribute resources to those.

Addendum:

Mathematics Algebra Pathways

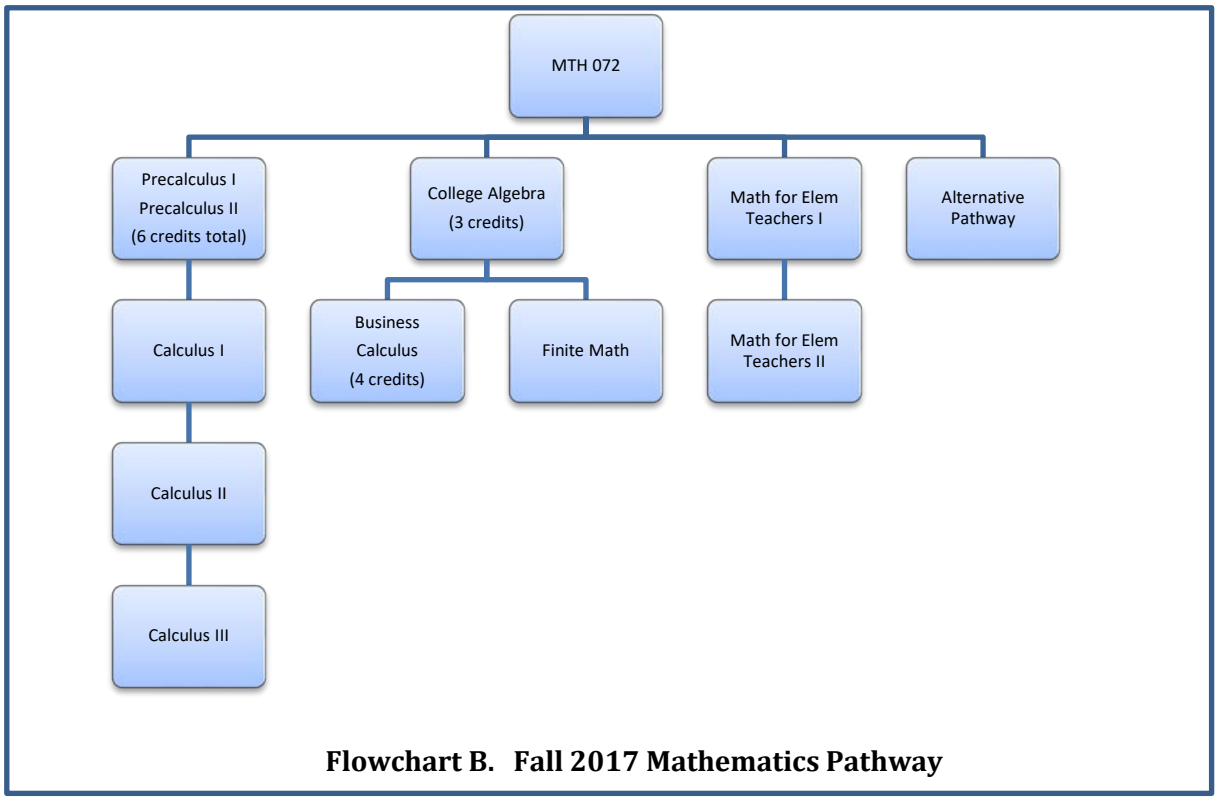
Fall 2017, the Waubonsee Mathematics Faculty implemented Algebra curricula creating distinct mathematics pathways for the STEM and Business/Social Science student. Before Fall 2017, the mathematics pathways were structured with all students in STEM and Business/Social Science majors taking the same MTH111 College Algebra, a four-credit course.



Flowchart A. Pre-fall 2017 Mathematics Pathway

Responding to Waubonsee's Transformational Plan, Goal 3.1, the Mathematics faculty designed new math curriculum pathways to reduce student time to completion and gave an explicit mathematics mapping for majors. **Flowcharts A** and **B**, give a visual representation of the changes made. MTH111, College Algebra (4 credits), and MTH112, Trigonometry (3 credits), were eliminated from the Waubonsee curriculum and replaced with MTH109, Algebra for the Business and Social Science (3 credits), MTH129, Precalculus I (3 credits) and MTH130, Precalculus II (3 credits). Students in the MTH109 track into MTH211, Calculus for Business and Social Science. The new STEM pathway reduces by one credit the number of required math credit hours for each STEM student. For the new Business/Social Sciences pathway the credit hour requirement in mathematics remained the

same with a one-credit reduction in the algebra requirement and a one-credit increase in MTH211, Calculus for the Business/Social Sciences.



Flowchart B. Fall 2017 Mathematics Pathway

There was a 39.6% decrease between the credit hours generated by MTH111 and the credit hours generated by MTH109 and MTH129. The decrease for head count was 19.5 % for mathematics with dual credit. Without including dual credit, there was a 35.1% decrease in credit hours generated by MTH111 and the new math pathways of MTH109 and MTH129. The decrease for head count was 13.5% generated by the new math pathways. The headcount decrease was not statistically significant when compared to the overall decline in overall credit enrollment for Fall 2017. One of the reasons for the pathway creation was to increase the Calculus sequence enrollment. There was a statistically significant increase in enrollment for MTH131 Calculus and Analytical Geometry I.

	Head Count			Credit Hours		
Math w/o Dual Credit	**201720**	**201820**	**%Change**	**201720**	**201820**	**%Change**
111 Total	238	0		952	0	
109 Total	0	100		0	300	
129 Total	0	106		0	318	
Total	**238**	**206**	**-13.45**	**952**	**618**	**-35.08**
112 Total	109	0		327	0	
130 Total	0	147		0	441	
Total	109	147	**34.86**	327	441	**34.86**
131 Total	89	104	**16.85**	356	416	**16.85**

Table A: STEM Math Pathway Enrollment

MTH211 was increased from 3 credits to 4 credits. Examination highlights that there is a 24% decrease in students enrolling in MTH211. Investigations should be made as to why this is occurring.

	Head Count			Credit Hours		
Math w/o Dual Credit	201720	201820	%Change	201720	201820	%Change
111 Total	238	0		952	0	
109 Total	0	100		0	300	
129 Total	0	106		0	318	
Total	**238**	**206**	**-13.45**	**952**	**618**	**-35.08**
211 Total	111	84	-24.32	333	336	**0.90**

Table B: Business/Social Science Pathway Enrollment

Offering Curricula More Cost Effectively

A review of the literature indicated that one of the main reason that at-risk students are not retained is due to cost. To reduce student cost the mathematics faculty moved from a publisher-based text to an open educational resource (OER) for the Basic Statistics and the Calculus sequence. Full-time faculty adopted the OER text for MTH131 Calculus I and for MTH107 Basic Statistics, AY2016-2017. Part-time faculty adopted the OER text for MTH131, AY2017 and for MTH107, AY2017-2018. While implementation with the full-time faculty did not change the success rate for students, implementation with the adjunct faculty correlates to a decrease in student success (Table C). To turn this around, while still offering students reduced course cost, faculty have been developing a shared Blackboard shell with resources and best practices.

Course	AY2012-2013	AY2013-2014	AY2014-2015	AY2015-2016	AY2016-2017	AY2017-2018
MTH107	74.08%	67.48%	67.65%	75.96%	71.84%	56.51%
MTH131	79.84%	76.63%	73.76%	78.08%	72.88%	66.93%
MTH132	71.63%	71.37%	83.49%	75.09%	70.97%	57.25%
MTH233	91.76%	98.15%	85.56%	77.94%	73.17%	42.35%

Table C: Student Success Rates for Statistics and the Calculus Sequence.

Career & Technical Education

COLLEGE NAME:	Waubonsee Community College
FISCAL YEAR IN REVIEW:	2017-2018

PROGRAM IDENTIFICATION INFORMATION

PROGRAM TITLE	*DEGREE OR CERT*	*TOTAL CREDIT HOURS*	*6-DIGIT CIP CODE*	*LIST ALL CERTIFICATE PROGRAMS THAT ARE STACKABLE WITHIN THE PARENT DEGREE*
Administrative Assistant	**Cert**	**18**	**52.0402**	

Address all fields in the template. If there are certificates and/or other stackable credentials within the program, please be sure to specify and sufficiently address all questions regarding each stackable credential.

Program Outcomes What are the overarching objectives/goals of the program?	1. Analyze ethical issues as they apply to business administration. 2. Apply office software technology to increase administrative productivity. 3. Communicate effectively in oral and written forms in a business environment.
To what extent are these outcomes being achieved?	Based on individual course assessment, we believe that these outcomes are being achieved. This academic year we are collection information in the aggregate and will have documented evidence of achievement to make curriculum improvements if necessary.
Past Program Review Action What action was reported last time the program was reviewed?	Continued with Minor Improvements

CTE PROGRAM REVIEW ANALYSIS

Complete the following fields and provide concise information where applicable. Please do not insert full data sets but summarize the data to completely answer the questions. Concise tables displaying this data may be attached. The review will be sent back if any of the below fields are left empty or inadequate information is provided.

List all pre-requisites for this program (courses, placement scores, etc.).	All courses have a recommended prerequisite of CIS 105 Introduction to Windows.
Please list or attach all required courses (including titles) for completion of this program including institution required courses (e.g. student success, first year, general education requirements, etc.).	**Administrative Assistant Certificate of Achievement** **Course Requirements** BUS 100 Introduction to Business ..... 3 BUS 130 Customer Service ..... 3 CIS 106 PowerPoint and Publisher for Business... 3 CIS 108 Comprehensive Word Processing..... 3 CIS 112 Comprehensive Excel Spreadsheet ..... 3 CIS 114 Comprehensive Access Database..... 3 PROGRAM TOTAL 18

Provide a rational for content/credit hours beyond 30 hours for a certificate or 60 hours for a degree.	Not Applicable.
INDICATOR 1: NEED	***RESPONSE***
1.1 How strong is the occupational demand for the program?	Job growth between 2018 and 2023 is projected 1.1%. In 2015 there were 1,460 openings in the region. The median hourly earnings for this program is $19.41 per hour which is $6.88 higher than the living wage for our community. Only nine regional institutions offer an administrative assistant program.
1.2 How has demand changed in the past five years and what is the outlook for the next five years?	Between the years of 2013 and 2018, there was a 3.7% increase in positions which was 6.2% above the national average Economic modeling data projects modest growth of 1.1% in the region through 2023.
1.3 What is the district and/or regional need?	Counties in the WCC district currently include 19,612 jobs with an expected increase of 393 jobs or 2.0% by 2023.
1.4 How are students recruited for this program?	CTE students are recruited through a variety of means including online and print advertising, as well as promoting CTE programs with high school career counselors. WCC awards credit for prior learning.
1.5 Where are students recruited from?	Students are recruited at local high schools and affiliated vocational centers through individual college visits, fairs and events. In addition, WCC reaches out to community organizations and local businesses to share information about certificate and degree programs. Opportunities are available for those interested to tour the facilities and learn more about CTE programs.
1.6 Did the review of program need result in actions or modifications? Please explain.	The review of program need did not result in actions or modifications.
INDICATOR 2: COST EFFECTIVENESS	***RESPONSE***
2.1 What are the costs associated with this program?	The direct costs associated with the program include: • Faculty salary and benefits (full-time and part-time) • Instructional supplies • Technology, software and services • Publications and dues • Full-time faculty professional development
2.2 How do costs compare to other programs on campus?	The cost associated with this program is $2068.05 per load hour which is 3% more than the institutional average of $2002.00 per load hour.
2.3 How is the college paying for this program and its costs (e.g. grants, etc.)?	The college pays for this program and its costs through tuition and fees.

2.4 If most of the costs are offset by grant funding, is there a sustainability plan in place in the absence of an outside funding source? Please explain.	Not Applicable as the program is supported by institutional funds.
2.5 Did the review of program cost result in any actions or modifications? Please explain.	The review of cost for the Administrative Assistant program did not result in any actions or modifications.
INDICATOR 3: QUALITY	***RESPONSE***
3.1 What are the program's strengths?	Online course development has been implemented to improve student access to the Administrative Assistant Certificate. This certificate can be completed 100% online. The Microsoft Imagine program and the Office in Education Program are agreements negotiated with Microsoft to offer complimentary software access to our students. Students also have the opportunity to sit for the Microsoft Office Specialist certification upon completion of the program.
3.2 What are the identified or potential weaknesses of the program?	We need to find a way to increase employer feedback and engagement to ensure that the curriculum meets the industry competencies. Additional student feedback is needed as well to identify weaknesses.
3.3 What are the delivery methods of this program? (e.g. traditional format/online/hybrid/team-teaching etc.)?	The program is delivered in face-to-face and online delivery methods.
3.4 How does this program fit into a career pathway?	Career Cluster: Business, Management and Administration Career Pathway: Administrative and Information Support CIP Program Title: Executive Assistant/Executive Secretary
3.5 What innovations have been implemented or brought to this program that other colleges would want to learn about?	We participate in the Microsoft Imagine program and the Office in Education Program which are agreements negotiated with Microsoft to offer complimentary software access to our students.
3.6 Are there dual credit opportunities? If so please list offerings and the associated high schools.	Currently, there are no dual credit opportunities for the Administrative Assistant program.
3.7 What work-based learning opportunities are available and integrated into the curriculum?	Currently, no internship opportunities are integrated into the curriculum for this certificate. However, students who complete the AAS in Business Administration will fulfill several program requirements because of the program and have the opportunity to complete an internship and receive additional elective credit.
3.8 Is industry accreditation required for this program (e.g. nursing)? If so, identify the accrediting body. Please also list if the college has chosen to voluntarily seek accreditation (e.g. automotive technology, NATEF).	Industry accreditation is not required or voluntarily sought for this program.

3.9 Are industry-recognized credentials offered? If so, please list.	Microsoft Office Specialist certifications are available for Word, Excel, Access and PowerPoint. These courses prepare students to take the exams proctored in the Henning Computer Center.
3.10 Is this an apprenticeship program? If so, please elaborate.	Not applicable.
3.11 If applicable, please list the licensure examination pass rate.	Not applicable.
3.12 What current articulation or cooperative agreements/initiatives are in place for this program?	Not applicable.
3.13 Have partnerships been formed since the last review that may increase the quality of the program and its courses? If so, with whom?	Not applicable.
3.14 What is the faculty to student ratio for courses in this program? Please provide a range and average.	Total enrollments in the course within the program 1220 Courses In Program (Ran FY2017) 6 Min Course Average Class Size 12.5 Max Course Average Class Size 32.5 Average of Course Average Class Size 22.1
3.15 What professional development or training is offered to adjunct and full time faculty that may increase the quality of this program?	Waubonsee provides professional development that focuses on improving the teaching skills of instructors. This professional development includes face-to-face training sessions, e-learnings, job aids and one-on-one training appointments to all employees of the college. Additional skills that instructors can learn include Blackboard training and support, instructional design, and classroom management strategies. In addition, a three-day orientation is offered for faculty at the beginning of each semester which provides professional development opportunities. Full-time faculty are also provided with professional development funds to attend discipline specific meetings and conferences provided by outside organizations.
3.16 What is the status of the current technology and equipment used for this program?	The technology and equipment associated with this program meet industry standards. In addition, the equipment and technology are evaluated and upgraded as a standard operating procedure within the Business and Career Technologies division and the Information Technology department.
3.17 What assessment methods are used to ensure student success?	• Cases • Tests/Quizzes • Projects • Presentations

3.18 How satisfied are students with their preparation for employment?	CTE graduates' satisfaction with their preparation for employment was last measured by the ICCB mandated Career and Technical Education Follow-up Survey. Since the CTE Survey is no longer mandated or collected by ICCB, WCC is developing a new Alumni Survey which will be administered annually beginning one year post-graduation. The intent is to capture long-range outcomes, including data about satisfaction with WCC's preparation for their employment.
3.19 How is student satisfaction information collected?	WCC uses two institutional level surveys to measure student satisfaction indicators: the Student Satisfaction Inventory (SSI) and the Community College Survey of Student Engagement (CCSSE). In addition, a graduating student survey was piloted in 2017. Spring 2018 the survey will be administered to all students completing petitions to graduate.
3.20 How are employers engaged in this program? (e.g. curriculum design, review, placement, work-based learning opportunities)	The program is not currently benefitting from the input and feedback from employers concerning curriculum design, review, placement and work-based learning opportunities. However, revised procedures and guidelines have been established and programs are required to hold two advisory committee meetings per academic year.
3.21 How often does the program advisory committee meet?	During the review period, no advisory committee meetings were held. However, per established guidelines for CTE programs, there is a minimum requirement of two programs per academic year.
3.22 How satisfied are employers in the preparation of the program's graduates?	Currently, college staff and administration are working on an annual employer survey to gauge satisfaction aimed at further evaluation of program outcomes.
3.23 How is employer satisfaction information collected?	Employer satisfaction is informally collected at career fairs and other program focused events, WCC continues to work on a formal process to survey employer satisfaction in order to move beyond reliance on anecdotal information alone.
3.24 Did the review of program quality result in any actions or modifications? Please explain.	We are developing advisory committees and will schedule two meetings per year beginning fall 2018 to assure our curriculum is in alignment with industry needs.

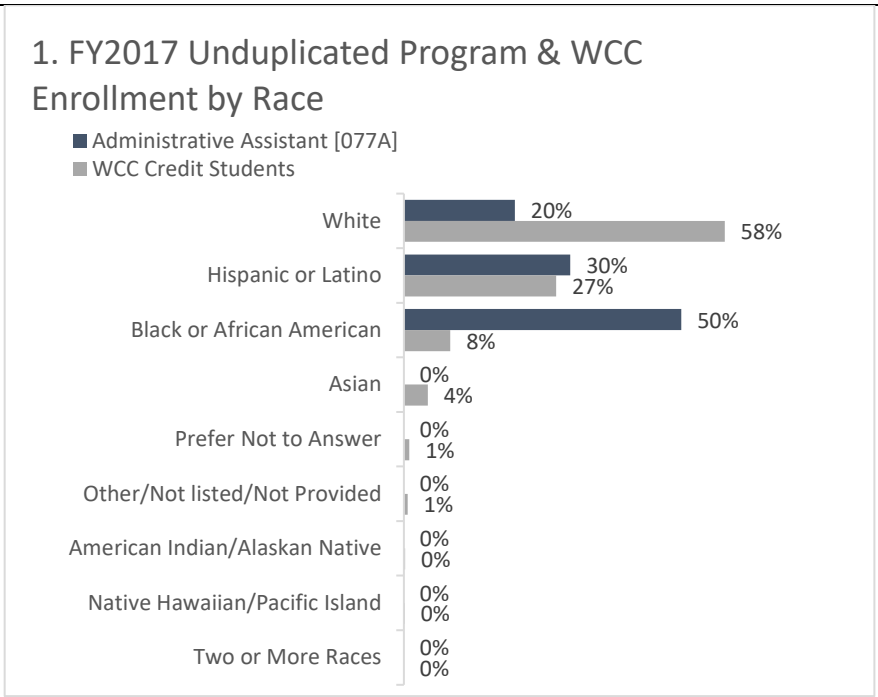
DATA ANALYSIS FOR CTE PROGRAM REVIEW

Please complete for each program reviewed. Colleges may report aggregated data from the parent program or report on enrollment and completion data individually for each certificate within the program. Provide the most recent 5 year longitudinal data available.

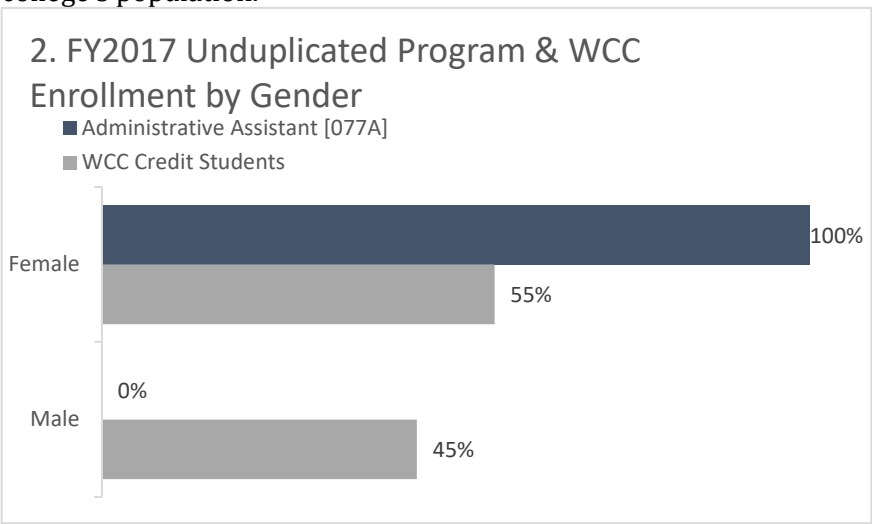
CTE PROGRAM	Administrative Assistant				
CIP CODE	52.0402				
	YEAR 1 (FY13)	*YEAR 2 (FY14)*	*YEAR 3 (FY15)*	*YEAR 4 (FY16)*	*YEAR 5 (FY17)*
NUMBER OF STUDENTS ENROLLED					10

NUMBER OF COMPLETERS					7
OTHER (PLEASE IDENTIFY)					

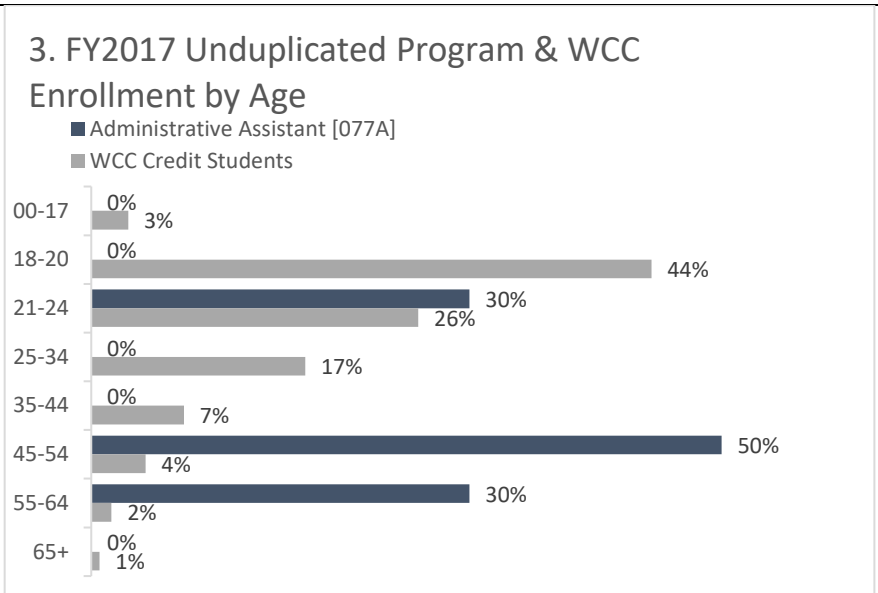
How does the data support the program goals? Elaborate.	WCC has not determined program goals in the area of enrollment and completion and current goals are based on total credit enrollment. By defining program goals as part of our continuous improvement process, beginning fall 2018 program admission goals will be implemented.
What disaggregated data was reviewed?	The data set reviewed consisted of students who selected the Administrative Assistant program of study. The data was retrieved from the Advance Data Warehouse and sourced from Banner.
Were there gaps in the data? Please explain.	Students are provided the opportunity to select their program of study on the New Student Information Form (NSIF) upon entry at WCC. Students can change program major declaration at any time online. There may have been students not included in the analysis, because the Administrative Assistant major was not selected even though the associated coursework was completed. In addition, the AAS in Administrative Office Systems was withdrawn and the certificate of achievement program was subsequently associated with Business Administration as the parent program. Due to this change, there may be students coded with the previous major code that are not captured within the disaggregated data set. Because of this, there was a variance in the number of students enrolled between years 1-4 (0 students) and year 5 (10 students).
What is the college doing to overcome any identifiable gaps?	Waubonsee is reviewing our intake process and analyzing how major codes are defined and updated when students change their program of study from their initial selection on the New Student Information Form.
Are the students served in this program representative of the total student population? Please explain.	This program's enrollment disproportionately have fewer White students and more Black or African American students compared to the overall WCC population, and the largest representation is first from Black or African American students, then Hispanic or Latino students.



The program's enrollment is overwhelmingly female compared to the college's population.

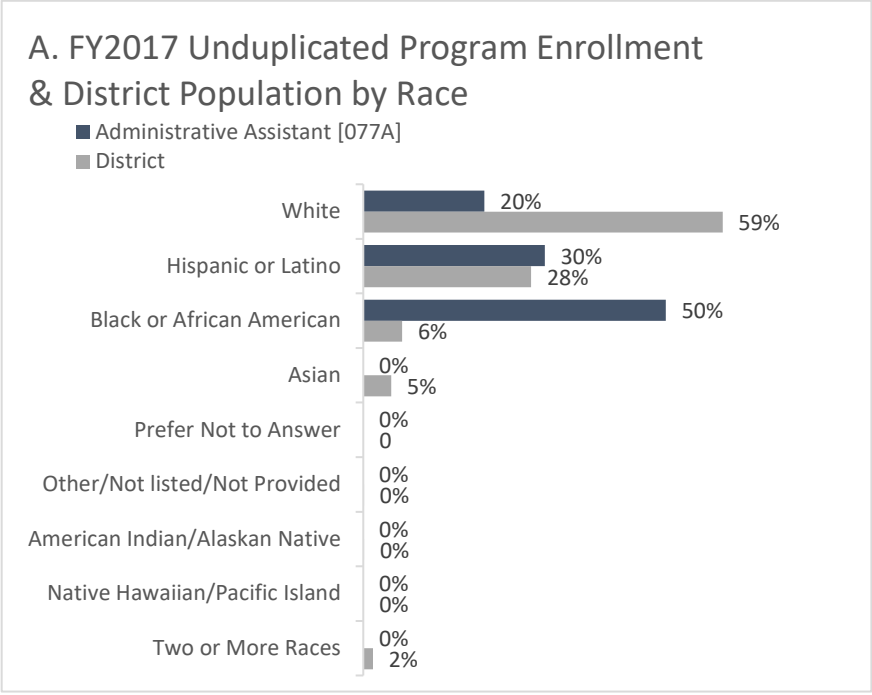


This program's enrollment disproportionately has fewer 18-20 year olds and more 45-54 and 55-64 year olds compared to the college's population. The largest representation is the 45-54 category.

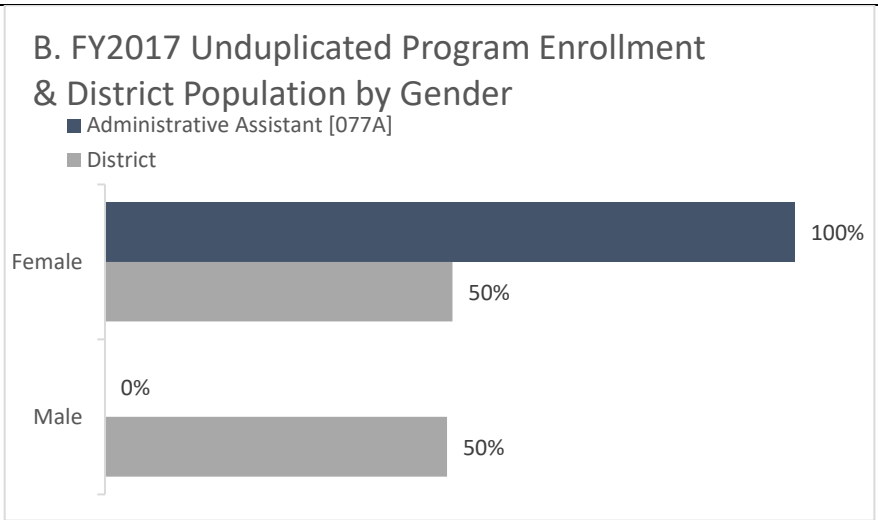


Are the students served in this program representative of the district population? Please explain.

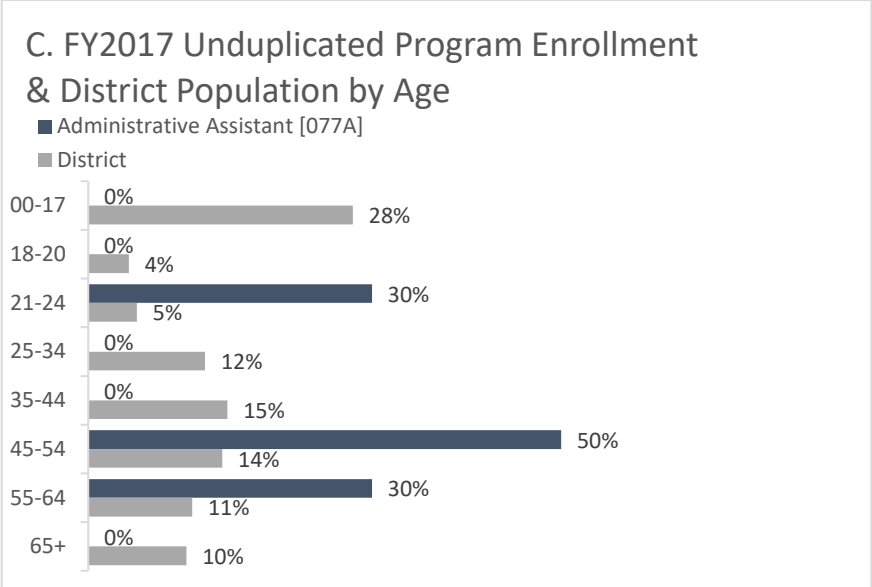
This program's enrollment disproportionately have fewer White students and more Black or African American students compared to the overall district population, and the largest representation is first from Black or African American students, then Hispanic or Latino students.



This program's enrollment is only female compared to the district's population.



This program's enrollment disproportionately has fewer 00-17 year olds and more 21-24 and 45-54 year olds. 45-54 year olds are also the largest category compared to the overall district population's largest category of 00-17. This is perhaps a good program for non-traditional students.



REVIEW RESULTS	
Action	☒ Continued with Minor Improvements ☐Significantly Modified

	☐Placed on Inactive Status ☐Discontinued/Eliminated ☐Other (please specify)
Summary Rationale Please provide a brief rationale for the chosen action.	This certificate provides opportunities for completers to sit for Microsoft Office Specialist certifications in Word, Excel, Access and PowerPoint. In addition, students who finish this certificate have a variety of job opportunities that range from Administrative Associate, Administrative Technician, Staff Assistant, Administrative Assistant, Office Assistant and Administrative Specialist. Employees with a certificate or at least some college make up the largest percentage of workers in this field (32%). Statewide data shows that this occupation is projected to have 1,010 jobs added annually.
Intended Action Steps What are the action steps resulting from this review? Please detail a timeline and/or dates for each step.	1. Collect and analyze assessment data by May 2019. 2. Create a curriculum sequence for the program by May 2019. 3. Review course outlines for program by May 2019. 4. Increase employer engagement by holding two advisory committee meetings within FY19 to discuss curriculum design, review, placement and work-based learning opportunities. Complete by May 2019.

Career & Technical Education	
College Name:	Waubonsee Community College (WCC)
Fiscal Year in Review:	2017-2018

Program Identification Information

Program Title	*Degree or Cert*	*Total Credit Hours*	*6-Digit CIP Code*	*List All certificate programs that are stackable within the parent degree*
Business Administration AAS	**Degree**	**60**	**52.0201**	**Management Certificate**

Address all fields in the template. If there are certificates and/or other stackable credentials within the program, please be sure to specify and sufficiently address all questions regarding each stackable credential.

Program Outcomes What are the overarching objectives/goals of the program?	1. Apply managerial theory to resolve business issues. 2. Analyze ethical issues as they apply to business administration. 3. Discuss the legal implications of decisions made in business. 4. Develop a marketing plan based on research that employs an effective marketing strategy. 5. Evaluate financial statements as they apply to the business environment.
To what extent are these outcomes being achieved?	Based on individual course assessment, the outcomes are being achieved. This academic year aggregate data collection will provide documented information and evidence of achievement to make curriculum improvements if necessary.
Past Program Review Action What action was reported last time the program was reviewed?	Continued with Minor Improvements

CTE Program Review Analysis

Complete the following fields and provide concise information where applicable. Please do not insert full data sets but summarize the data to completely answer the questions. Concise tables displaying this data may be attached. The review will be sent back if any of the below fields are left empty or inadequate information is provided.

List all pre-requisites for this program (courses, placement scores, etc.).	Although many of the courses have a recommended prerequisite, None of the 60 credits require prerequisites to enroll in a course.

Please list or attach all required courses (including titles) for completion of this program including institution required courses (e.g. student success, first year, general education requirements, etc.).	**Business Administration Associate in Applied Science** **General Education Requirements……15** COM 100 or 121 Communications……3 ENG 101 or 152 English……3 ENG 102 or 153 English……3 Economics elective……3 Mathematic elective……3 **Management Major Program Requirements……33** ACC 101 or 202 Accounting……3 ACC 125 or 203 Accounting……3 BUS 100 Introduction to Business……3 BUS 201 or 211 Business Law……3 BUS 215 Business Ethics……3 BUS 220 Leadership in Business……3 CIS 110 Business Information Systems……3 CIS 112 Comprehensive Excel Spreadsheet……3 MGT 200 Principles of Management……3 MKT 200 Principles of Marketing……3 Economics Elective (Recommend ECN 201 or ECN 202)……3 **Electives and Emphasis Areas……12** **Management** BUS 225 Organizational Behavior……3 MGT 210 Supervisory Management……3 MGT 215 Human Resources Management……3 **Marketing** MKT 210 Principles of Selling……3 MKT 215 Principles of Advertising……3 MKT 260 Consumer Behavior……3 **Electives** Electives may be selected from: Accounting, Business Administration, Computer Information systems, Construction Management, Economics, Finance, Internship, Management, Marketing, Real Estate, World Wide Web or PSY 245. **Program Total……60** **Management Certificate of Achievement** BUS 100 Introduction to Business……3 BUS 220 Leadership in Business……3 CIS 110 Business Information systems……3 MGT 200 Principles of Management……3 MGT 210 Supervisory Management……3 MGT 215 Human Resources management I……3
Provide a rational for content/credit hours beyond 30 hours for a certificate or 60 hours for a degree.	Not Applicable.
INDICATOR 1: NEED	***RESPONSE***

1.1 How strong is the occupational demand for the program?	In 2015, there were 7,556 annual openings with 10,398 regional program completions. The completions exceed the openings.
1.2 How has demand changed in the past five years and what is the outlook for the next five years?	During the review period there was an 8.1% increase in positions which was 16% above the national average. Economic modeling data projects the business occupation to grow 2.7% in the region through 2023.
1.3 What is the district and/or regional need?	Counties in the WCC's district currently include 63,722 jobs with an expected increase of 2,036 jobs or 3.2% by 2023.
1.4 How are students recruited for this program?	CTE students are recruited through a variety of means including online and print advertising, as well as promoting CTE programs with high school career counselors. High school students can earn early college credit through articulation agreements established by the Valley Education for Employment System (VALEES). In addition, the college hosts several open houses to showcase the myriad of programs and services.
1.5 Where are students recruited from?	Students are recruited at local high schools and affiliated vocational centers through individual college visits and college fairs. In addition, WCC reaches out to community organizations and local businesses to share information about certificate and degree programs. Opportunities are available for those interested to tour the facilities and learn more about the program.
1.6 Did the review of program need result in actions or modifications? Please explain.	The program review of need did not result in any actions or modifications.
INDICATOR 2: COST EFFECTIVENESS	***RESPONSE***
2.1 What are the costs associated with this program?	The direct costs associated with the program include: • Faculty salary and benefits (full-time and part-time) • Instructional supplies • Technology, software and services • Publications and dues • Full-time faculty professional development
2.2 How do costs compare to other programs on campus?	The cost associated with this program is $951.83 per load hour which is 52% less than the institutional average of $2002.00 per load hour.
2.3 How is the college paying for this program and its costs (e.g. grants, etc.)?	The college pays for this program and its costs through tuition and fees.
2.4 If most of the costs are offset by grant funding, is there a sustainability plan in place in the absence of an outside funding source? Please explain.	Not applicable as the program is supported by institutional funds.
2.5 Did the review of program cost result in any actions or modifications? Please explain.	The review of cost for the Business program did not result in any actions or modifications.

INDICATOR 3: QUALITY	*RESPONSE*
3.1 What are the program's strengths?	The program has a combination of courses that prepare students for a variety of careers in business administration, management, marketing and other functional areas related to business. Students can participate in internships for elective credit and choose an area of emphasis in management or marketing. The degree and certificate programs can be completed 100% online.
3.2 What are the identified or potential weaknesses of the program?	While the program can be completed 100% online, it would be enhanced by offering courses in a hybrid modality. Consideration may need to be given to the class capacities (36) for online courses, which may have a negative impact on the quality of instruction. Also, students need a clear visual pathway from high school to community college and to the four-year university. In addition, increased employer feedback and engagement is needed to ensure that the curriculum meets the competencies needed within the industry.
3.3 What are the delivery methods of this program? (e.g. traditional format/online/hybrid/team-teaching etc.)?	The program is delivered in face-to-face and online delivery methods.
3.4 How does this program fit into a career pathway?	Career Cluster: Business Management & Administration Career Pathway: General Management CIP Program Title: Business Administration and Management, General
3.5 What innovations have been implemented or brought to this program that other colleges would want to learn about?	Online course development has been implemented. This will assist in increasing student access to be able to enroll in the AAS Business Administration Degree as well as the Management Certificate. The Microsoft Imagine program and the Office in Education Program are agreements negotiated with Microsoft to offer complimentary software access to our students. Also, the degree contains areas of emphasis in both management and marketing. Professional organizations for students include both the American Management Association and the American Marketing Association.
3.6 Are there dual credit opportunities? If so please list offerings and the associated high schools.	Dual credit is offered for this degree (general education requirements, ACC202, ACC203 and CIS110). In addition, articulated credit for accounting and computer information systems courses aid in program completion for high school students. Credit for prior learning opportunities exist for non-traditional students..
3.7 What work-based learning opportunities are available and integrated into the curriculum?	Students can earn elective credit for internships as part of this degree.
3.8 Is industry accreditation required for this program (e.g. nursing)? If so, identify the accrediting body. Please also list if the college has chosen to voluntarily seek accreditation (e.g. automotive technology, NATEF).	Industry accreditation is not required or voluntarily sought for this program.

3.9 Are industry-recognized credentials offered? If so, please list.	There are no identified industry recognized credentials required in the program. However, with the variety of courses included in the degree program, students can earn credentials ranging from Microsoft Office Specialist certifications to professional development certificates offered through organizations like the American Management Association and/or American Marketing Association. In addition, individual disciplines within the degree have organizations that identify the knowledge, skills and abilities required for industry professionals.
3.10 Is this an apprenticeship program? If so, please elaborate.	Not applicable.
3.11 If applicable, please list the licensure examination pass rate.	Not applicable.
3.12 What current articulation or cooperative agreements/initiatives are in place for this program?	**Articulation Agreements:** Governors State University Northern Illinois University Eastern Illinois University https://www.waubonsee.edu/programs-courses/transfer-programs/transferring-credit-waubonsee/articulation-agreements **Articulated Credit:** Valley Education for Employment System (VALEES) http://valees.org/early_college_credit_draft.aspx
3.13 Have partnerships been formed since the last review that may increase the quality of the program and its courses? If so, with whom?	During the review period, no partnerships have been formed that increased the quality of the program.
3.14 What is the faculty to student ratio for courses in this program? Please provide a range and average.	Total End of Term Program Enrollment 37 34 Courses In Program (Ran FY2017) 13 Min Course Average Class Size 17.4 Max Course Average Class Size 27.9 Average of Course Average Class Size 23.8

3.15 What professional development or training is offered to adjunct and full time faculty that may increase the quality of this program?	Waubonsee provides face-to-face training sessions, e-learnings, job aids and one-on-one appointments to all employees of the college. Topics include Blackboard training and support, instructional design, classroom management strategies. In addition, a three day orientation is offered for faculty at the beginning of each semester which provides professional development opportunities. Full-time faculty are also provided with professional development funds to attend discipline-specific meetings and conferences provided by outside organizations. Several new positions were recently created to focus on faculty development at the college. These include a Dean of Faculty Development, an Assistant Dean for Online Learning and Flexible Delivery and three faculty liaisons to focus on faculty development and engagement. In addition, full-time faculty attend the Illinois Business Education Association (IBEA) and the National Business Education Association (NBEA) conferences.
3.16 What is the status of the current technology and equipment used for this program?	The technology and equipment associated with this program meet industry standards. In addition, the equipment and technology are evaluated and upgraded as a standard operating procedure within the Business and Career Technologies division and the Information Technology department.
3.17 What assessment methods are used to ensure student success?	• Cases • Tests/Quizzes • Projects • Presentations
3.18 How satisfied are students with their preparation for employment?	In the past, CTE graduates' satisfaction with preparation for employment was measured by the ICCB mandated Career and Technical Education Follow-up Survey. However, since that CTE Survey is no longer mandated or collected by ICCB, WCC is developing a new Alumni Survey which will be administered annually beginning one year post-graduation. The intent is to capture long-range outcomes, including data about satisfaction with WCC's preparation for their employment.
3.19 How is student satisfaction information collected?	WCC uses two institutional level surveys to measure student satisfaction indicators: the Student Satisfaction Inventory (SSI) and the Community College Survey of Student Engagement (CCSSE). In addition, a graduating student survey was piloted in 2017. The survey will be administered to all students completing petitions to graduate in 2018.
3.20 How are employers engaged in this program? (e.g. curriculum design, review, placement, work-based learning opportunities)	The program is not currently benefitting from the input and feedback from employers concerning curriculum design, review, placement and work-based learning opportunities. However, revised procedures and guidelines have been established and programs are required to hold two advisory committee meetings per academic year.
3.21 How often does the program advisory committee meet?	During the review period, no advisory committee meetings were held. However, per established guidelines for CTE programs, there is a minimum requirement of two programs per academic year.

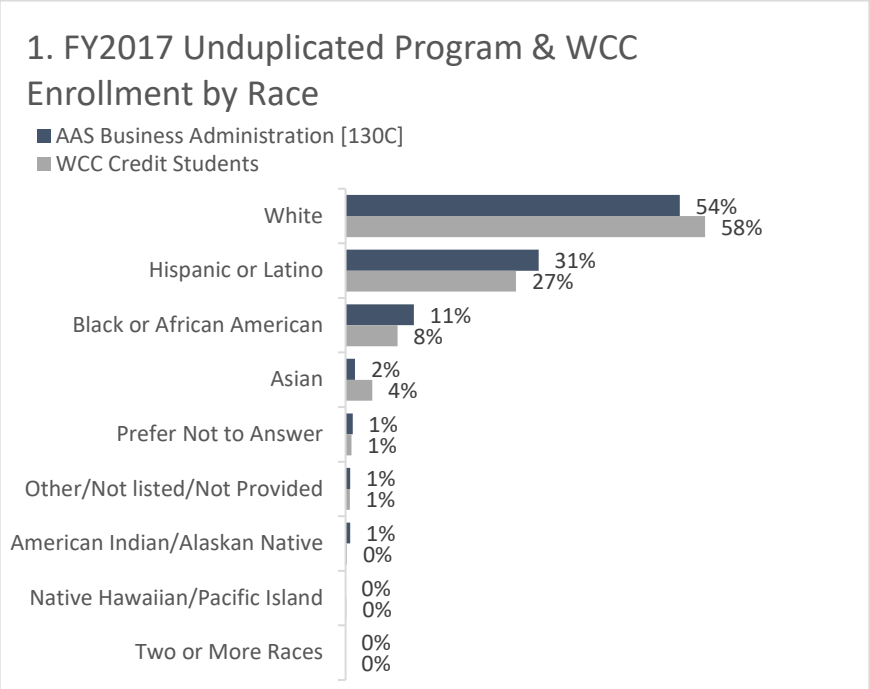
3.22 How satisfied are employers in the preparation of the program's graduates?	Currently, college staff and administration are working on an annual employer survey to gauge satisfaction aimed at further evaluation of program outcomes.
3.23 How is employer satisfaction information collected?	Employer satisfaction is informally collected at career fairs and other program focused events, WCC continues to work on a formal process to survey employer satisfaction in order to move beyond reliance on anecdotal information alone.
3.24 Did the review of program quality result in any actions or modifications? Please explain.	The program review of quality did not result in any actions or modifications.

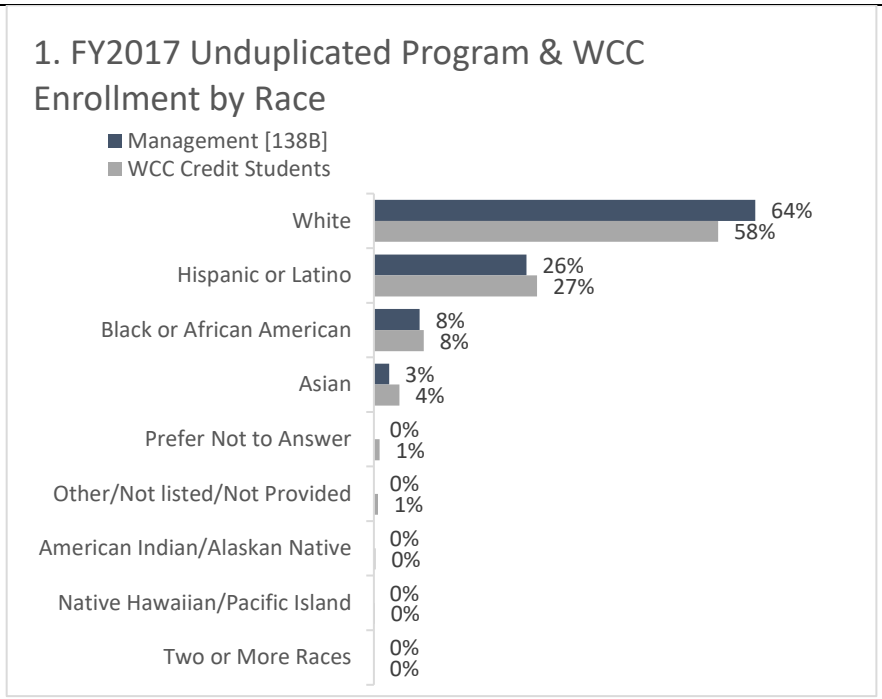
DATA ANALYSIS FOR CTE PROGRAM REVIEW

Please complete for each program reviewed. Colleges may report aggregated data from the parent program or report on enrollment and completion data individually for each certificate within the program. Provide the most recent 5 year longitudinal data available.

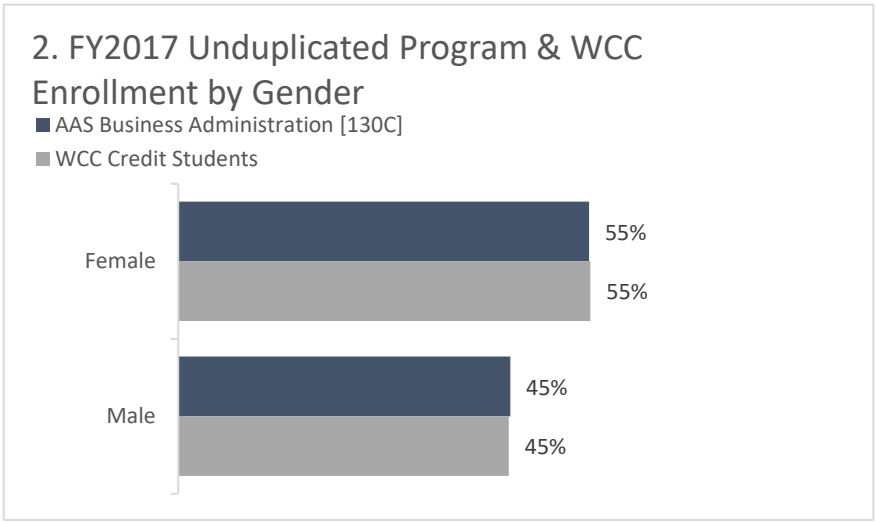
CTE PROGRAM	Business Administration				
CIP CODE	52.0201				
	YEAR 1 (2013)	*YEAR 2 (2014)*	*YEAR 3 (2015)*	*YEAR 4 (2016)*	*YEAR 5 (2017)*
NUMBER OF STUDENTS ENROLLED	Cert 45	AAS 96 Cert 41	AAS 155 Cert 49	AAS 225 Cert 63	AAS 264 Cert 39
NUMBER OF COMPLETERS	Cert 5	AAS 1 Cert 7	AAS Cert20	AAS 9 Cert 11	AAS 9 Cert 5
OTHER (PLEASE IDENTIFY)					

How does the data support the program goals? Elaborate.	WCC has not determined program goals in the area of enrollment and completion and current goals are based on total credit enrollment. By defining program goals as part of our continuous improvement process, beginning fall 2018 program admission goals will be implemented.
What disaggregated data was reviewed?	The data set reviewed consisted of students who selected the Business Administration program of study. The data was retrieved from the Advance Data Warehouse and sourced from Banner.
Were there gaps in the data? Please explain.	Students are provided the opportunity to select their program of study on the New Student Information Form (NSIF) upon entry at WCC. Students can change program major declaration at any time online. There may have been students not included in the analysis, because the Business Administration major was not selected even though the associated coursework was completed. The data shows that students who complete are mostly likely to earn a certificate of achievement and it typically takes a year or more to complete. In addition, there is a gap in completion (year over year) for students enrolled in the degree and certificate programs.

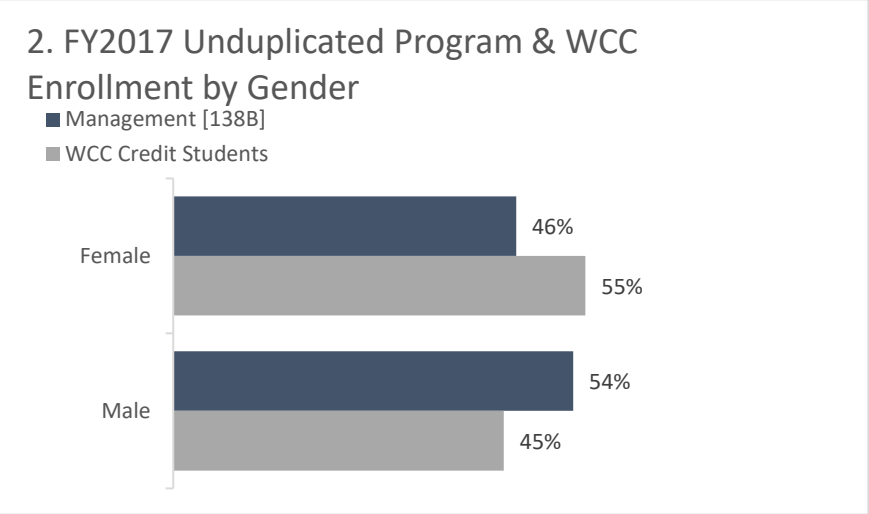
What is the college doing to overcome any identifiable gaps?	Waubonsee is reviewing our intake process and analyzing how major codes are defined and updated when students change their program of study from their initial selection on the New Student Information Form.
Are the students served in this program representative of the total student population? Please explain.	AAS Business Administration [130C] This program's enrollment aligns with the college's population with the largest representation from White students and the second largest population from Hispanic or Latino students.  Management [138B] This program's enrollment aligns with the college's population with the largest representation from White students and the second largest population from Hispanic or Latino students.



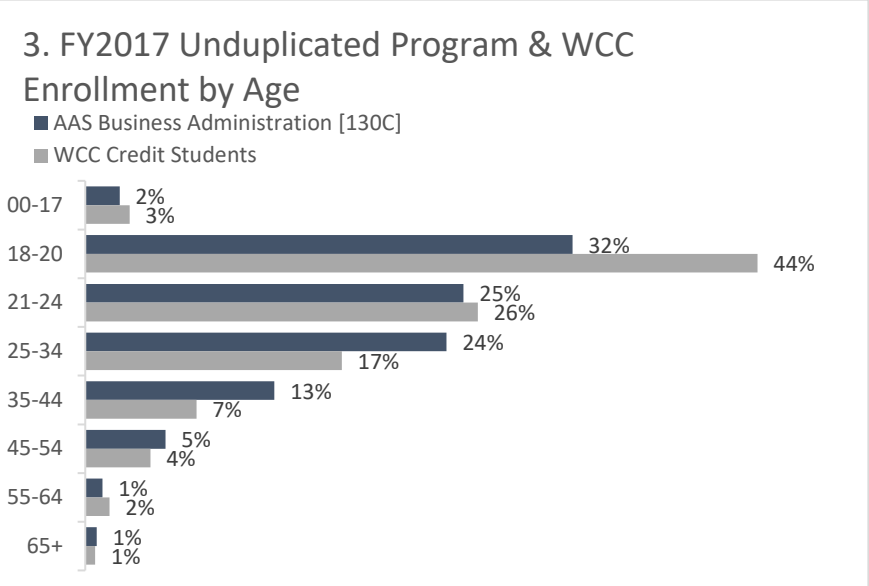
AAS Business Administration [130C]
This program's enrollment generally aligns with the college's population, with females as the majority.



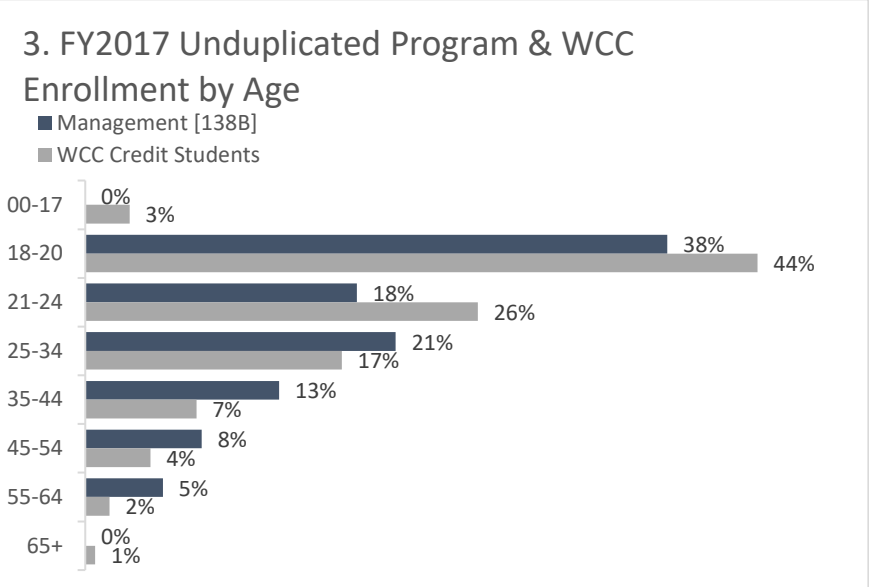
Management [138B]
This program's enrollment generally aligns with the college's population, though males are the majority.



AAS Business Administration [130C]
This program's enrollment disproportionately has fewer 18-20 year olds compared to the college's population though the largest representation is the 18-20 category.

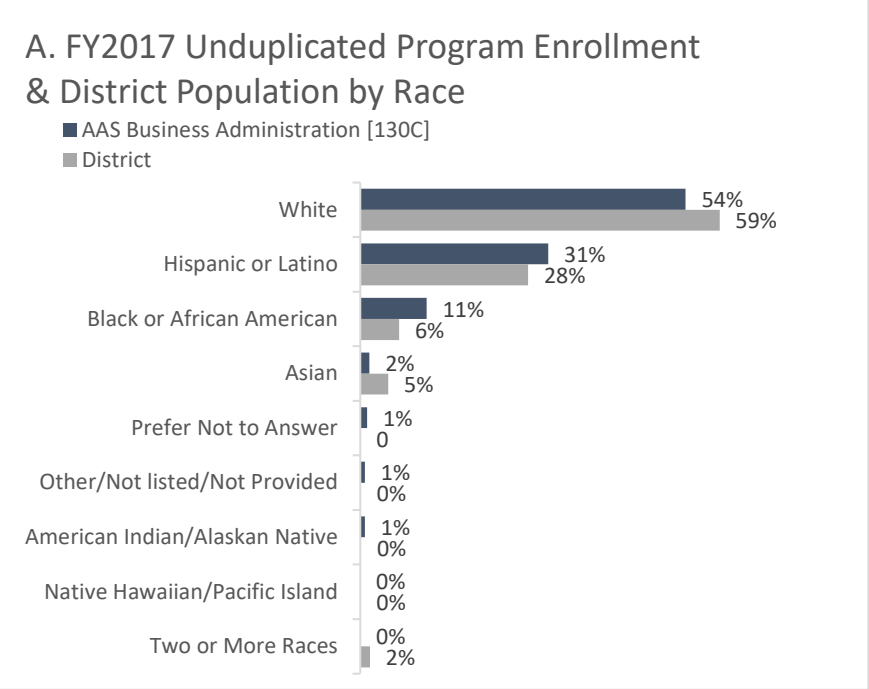


Management [138B]
This program's enrollment aligns with the college's population with the largest representation from 18-20 year old students, though the second largest population is from 25-34 year old students.

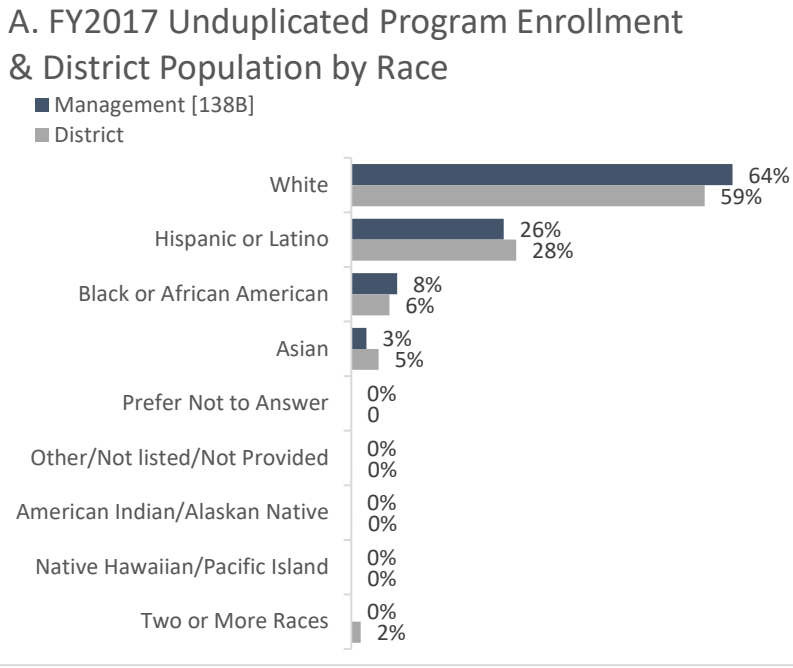


Are the students served in this program representative of the district population? Please explain.

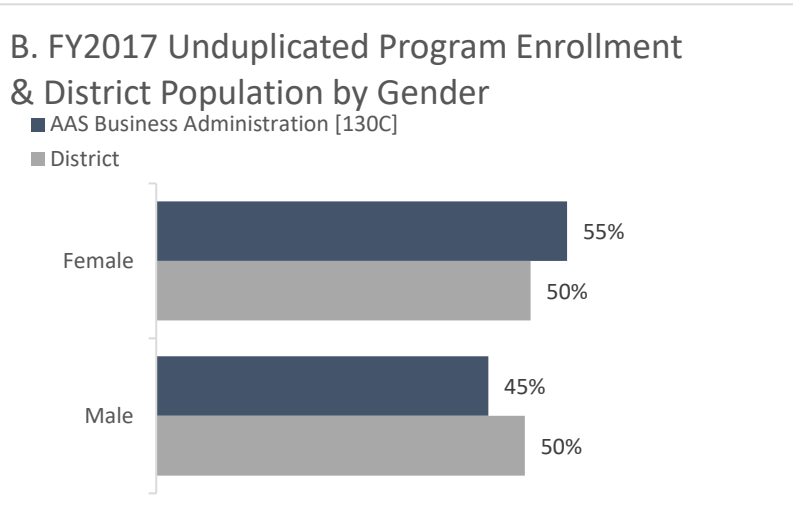
AAS Business Administration [130C]
This program's enrollment aligns with the district's population with the largest representation from White students and the second largest population from Hispanic or Latino students.



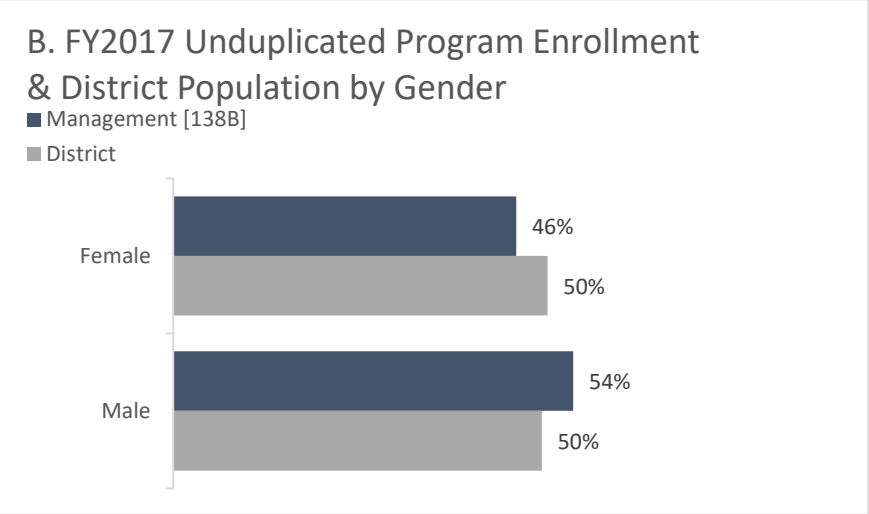
Management [138B]
This program's enrollment aligns with the district's population with the largest representation from White students and the second largest population from Hispanic or Latino students.



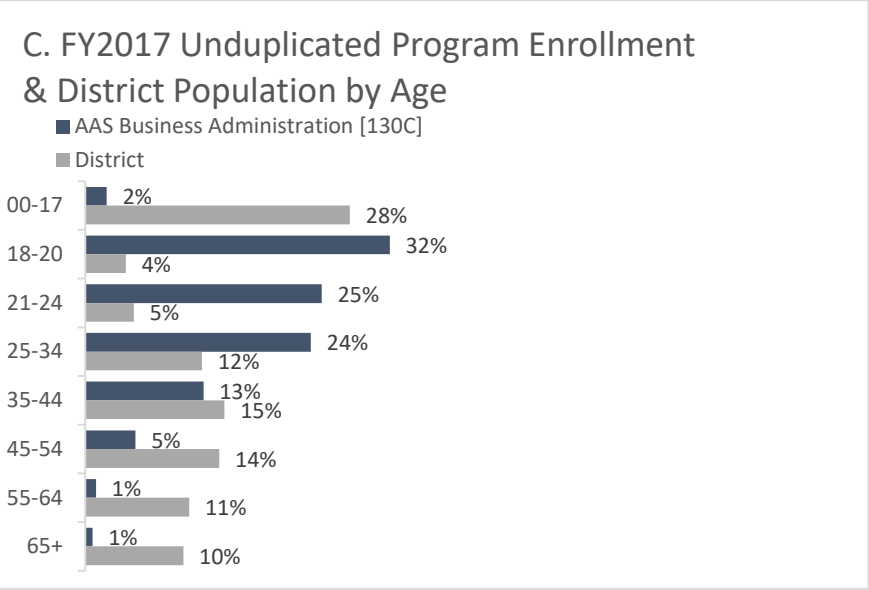
AAS Business Administration [130C]
This program's enrollment generally aligns with the district's population, with females as the majority.



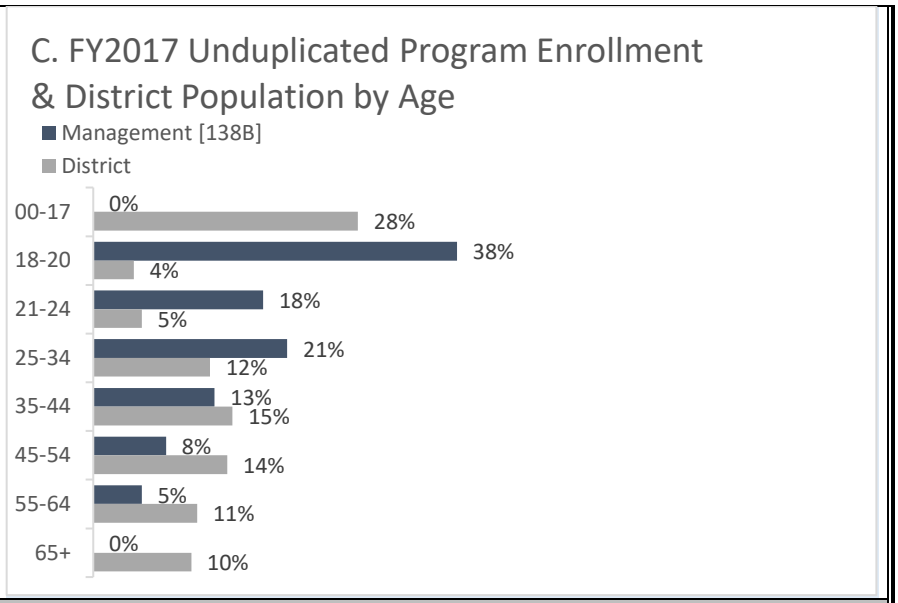
Management [138B]
This program's enrollment generally aligns with This district's population, though males are the majority.



AAS Business Administration [130C]
This program's enrollment disproportionately has fewer 00-17 year olds and more 18-20, 21-24, and 25-34 year olds. 18-20 year olds are also the largest category compared to the overall district population's largest category of 00-17.



Management [138B]
This program's enrollment disproportionately has fewer 00-17 year olds and more 18-20 and 21-24 year olds. 18-20 year olds are also the largest category compared to the overall district population's largest category of 00-17.



REVIEW RESULTS	
Action	☒ Continued with Minor Improvements ☐Significantly Modified ☐Placed on Inactive Status ☐Discontinued/Eliminated ☐Other (please specify)
Summary Rationale Please provide a brief rationale for the chosen action.	
Intended Action Steps What are the action steps resulting from this review? Please detail a timeline and/or dates for each step.	1. Collect and analyze assessment for program outcome for ethics by December 1, 2018. 2. Create curriculum sequence for program by May 2019. 3. Review course outlines for program by May 2019.

Career & Technical Education

COLLEGE NAME:	Waubonsee Community College (WCC)
FISCAL YEAR IN REVIEW:	2017-2018

PROGRAM IDENTIFICATION INFORMATION

PROGRAM TITLE	*DEGREE OR CERT*	*TOTAL CREDIT HOURS*	*6-DIGIT CIP CODE*	*LIST ALL CERTIFICATE PROGRAMS THAT ARE STACKABLE WITHIN THE PARENT DEGREE*
Computer Aided Design and Drafting	**Degree**	**60**	**15.1302**	**1. CADD Certificate** **2. Advanced CADD Certificate**

Address all fields in the template. If there are certificates and/or other stackable credentials within the program, please be sure to specify and sufficiently address all questions regarding each stackable credential.

Program Outcomes What are the overarching objectives/goals of the program?	1. Prepare accurate engineering drawings showing the detail and method of assembly. 2. Solve engineering problems. 3. Design a comprehensive project using advanced engineering programs. 4. Describe the purpose of industry codes or standards. 5. Analyze product designs or product improvement ideas. 6. Prepare accurate engineering drawings showing the detail or method of assembly.
To what extent are these outcomes being achieved?	During the review period, new pathways were added and new courses and outcomes were developed. The program is in the process of assessing the new courses to determine the extent the outcomes are being achieved. Annually, a minimum of one program outcome will be assessed. Spring 2018 data was collected aligned to a program outcome. Fall 2018 data will be analyzed to determine if we are meeting our program outcomes.
Past Program Review Action What action was reported last time the program was reviewed?	Continued with Minor Improvements

CTE PROGRAM REVIEW ANALYSIS

Complete the following fields and provide concise information where applicable. Please do not insert full data sets but summarize the data to completely answer the questions. Concise tables displaying this data may be attached. The review will be sent back if any of the below fields are left empty or inadequate information is provided.

List all pre-requisites for this program (courses, placement scores, etc.).	• CAD240 Introduction to Parametric Modeling Using Solidworks requires a prerequisite of CAD102 AutoCAD I. • CAD241 Intro to Parametric Modeling Using Inventor requires a prerequisite of CAD102 AutoCAD I. • CAD242 Advanced Parametric Modeling Using SolidWorks requires a prerequisite of CAD240 Introduction to Parametric Modeling Using Solidworks • CAD243 Advanced Parametric Modeling Using Inventor requires a prerequisite of CAD241 Intro to Parametric Modeling Using Inventor • CAD270 Product Design and Development requires a prerequisite of CAD120 AutoCAD II.
Please list or attach all required courses (including titles) for completion of this program including institution required courses (e.g. student success, first year, general education requirements, etc.).	**General Education Requirements..... 15** COM 100 ***or*** 121 Communications.....3 ENG 101 ***or*** 152 English.....3 ENG 102 ***or*** 153 English.....3 Mathematics elective*.....3 Social and Behavioral Sciences elective •.....3 **Core Program Requirements..... 16** AMT 100 Intro to Mfg Automation Systems.....3 CIS 110 Business Information Systems .....3 EGR 101 Engineering Graphics .....3 MTT 100 Safety Principles.....1 MTT 102 Manual Machine Shop Operations.....3 MTT 106 Computer Integrated Manufacturing…….3 **CAD Major Program Requirements..... 23** CAD 102 AutoCAD I .....3 CAD 120 AutoCAD II .....3 CAD 122 Geometric Dimensioning/Tolerancing.....2 CAD 240 Intro-Parametric Modeling/SolidWorks…..3 CAD 241 Intro-Parametric Modeling/Inventor.....3 CAD 242 Adv Parametric Modeling/SolidWorks.....3 CAD 243 Adv Parametric Modeling/Inventor.....3 CAD 270 Product Design and Development .....3 **Electives..... 6** Select electives from: Art (ART110/111 and ART120/121), Automation Technology (AMT), Business Administration (BUS), Computer Aided Design and Drafting (CAD), Computer Information Systems (CIS), Construction Management (CMT), Electronics Technology (ELT), Industrial Technology (IDT), Internship (ITS), Machine Tool Technology (MTT), Management (MGT), Marketing (MKT), Mathematics (MTH), Welding Technology (WLD). **PROGRAM TOTAL..... 60**
Provide a rational for content/credit hours beyond 30 hours for a certificate or 60 hours for a degree.	Not Applicable.
INDICATOR 1: NEED	***RESPONSE***

1.1 How strong is the occupational demand for the program?	Trends regionally according to economic data indicate a decrease in jobs by 1.7% between 2018 and 2023. Although the percentage of job growth is not trending as strong, the number of openings in the county, regionally and in the state are strong. In addition, the median hourly earnings are $24.72 per hour, which is well above the living wage for the county of $12.53 per hour. Last year, to help guide students and meet industry needs, a manufacturing pathway was created. This year two additional pathways were created, which include four new courses: one Architectural pathway includes four new courses that will address the high demand for Architectural and Civil engineering. The four classes are MicroStation I, Residential Architecture, Commercial Architecture and Civil Engineering. The other is a Design pathway, for those students who want to focus on design and not be industry specific.
1.2 How has demand changed in the past five years and what is the outlook for the next five years?	According to economic modeling data, there was a 6.9% increase in the market between the years 2012 and 2017. The outlook for the next five years indicates a -1.7% change. Although growth is not indicated, the outlook appears stable.
1.3 What is the district and/or regional need?	According to economic modeling data, there are currently 443 CADD related jobs in the district. In addition, an average of 8 students per year were placed into CAD positions over the last five years. Also, the economic modeling data shows that from 2014-2024 the district will have a 3.4% increase. This is 1% above the national average.

1.4 How are students recruited for this program?	CTE students are recruited through a variety of means including online and print advertising, as well as promoting CTE programs with high school career counselors. High school students can earn early college credit through articulation agreements established by the Valley Education for Employment System (VALEES). In addition, the college hosts several open houses to showcase the myriad of programs and services. The CAD program also recruits high school students through our dual credit offerings at West Aurora High School (WAHS) and Yorkville High School (YHS) students.
1.5 Where are students recruited from?	Students are recruited at local high schools and affiliated vocational centers through individual college visits and college fairs. In addition, WCC reaches out to community organizations and local businesses to share information about certificate and degree programs. Opportunities are available for those interested to tour the facilities and learn more about the program.
1.6 Did the review of program need result in actions or modifications? Please explain.	The review of program need did not result in any actions or modifications.
INDICATOR 2: COST EFFECTIVENESS	***RESPONSE***

2.1 What are the costs associated with this program?	The direct costs associated with the program include: • Faculty salary and benefits (full-time and part-time) • Instructional supplies • Technology, software and services • Publications and dues • Full-time faculty professional development
2.2 How do costs compare to other programs on campus?	The cost associated with this program is $1,903.28 per load hour which is 5% less than the institutional average of $2002.00 per load hour.
2.3 How is the college paying for this program and its costs (e.g. grants, etc.)?	The college pays for this program and its costs through tuition and fees.
2.4 If most of the costs are offset by grant funding, is there a sustainability plan in place in the absence of an outside funding source? Please explain.	Not applicable as the program is supported by institutional funds.
2.5 Did the review of program cost result in any actions or modifications? Please explain.	The review of cost for the Computer Aided Design and Drafting program did not result in any actions or modifications.
INDICATOR 3: QUALITY	***RESPONSE***

3.1 What are the program's strengths?	Students who successfully complete either the certificates and/or degree are knowledgeable in the following: drafting and design history, terminology, processes, procedures, industry standards and currently three design software (AutoCAD 2D and 3D, parametric modeling software including Inventor and Solidworks). The CAD program has strong industry partners who offer internships and job opportunities. Other strengths are the adjunct faculty who work in industry on a daily basis using the software and bringing that knowledge to the program and students.
3.2 What are the identified or potential weaknesses of the program?	The following are identified weaknesses that will be addressed over the next two years to help improve the quality of the program. 1.) One new LAB (15 workstations) to support additional courses. 2.) Standardize the workstation in all labs to include dual monitors. 3.) Separate the classroom and the prototype lab to create a true prototyping lab with additional equipment and a part-time support to help faculty and students complete design projects.
3.3 What are the delivery methods of this program? (e.g. traditional format/online/hybrid/team-teaching etc.)?	The delivery methods provided for students in the Computer Aided Design program are offered in a traditional format with limited online course options.
3.4 How does this program fit into a career pathway?	Career Cluster: Architecture and Construction Career Pathway: Design/Pre-Construction Pathway CIP Program Title: CAD/CADD Drafting and/or Design Technology/Technician

3.5 What innovations have been implemented or brought to this program that other colleges would want to learn about?	With the help of the adjunct staff who are industry professionals, projects and exams have been created that are geared toward industry. This gives the students real-life projects as a drafter and/or designer. Also, a prototyping lab is being built. This lab has four 3D printers and a laser cutter. In addition, the CAD and MTT faculty collaborate on a project yearly where the CAD students create a design and the MTT students manufacture the design.
3.6 Are there dual credit opportunities? If so please list offerings and the associated high schools.	Dual credit opportunities are available for students at West Aurora High School (WAHS) and Yorkville High School (YHS). Also, the faculty collaborate with other public and private schools within the district (i.e. Aurora Central Catholic High School). In addition, opportunities related to the program are offered to district students attending vocational centers (Fox Valley Career Center and Indian Valley Vocational Center). Credit for prior learning opportunities exist for non-traditional students.
3.7 What work-based learning opportunities are available and integrated into the curriculum?	Each class has one or more projects that students work on individually or as a team. These projects were created based on work applications that students will see when working in the CAD industry. For example, next semester, the AutoCAD II class will work on a new Business and Career Technologies building design. Internship opportunities will also be identified with local industries for Waubonsee students.

3.8 Is industry accreditation required for this program (e.g. nursing)? If so, identify the accrediting body. Please also list if the college has chosen to voluntarily seek accreditation (e.g. automotive technology, NATEF).	Industry accreditation is not required or voluntarily sought for this program.
3.9 Are industry-recognized credentials offered? If so, please list.	Industry-recognized credentials are not currently offered. The program has a goal to offer AutoDesk and Solidworks certification by the 2020-2021 academic year.
3.10 Is this an apprenticeship program? If so, please elaborate.	Not Applicable.
3.11 If applicable, please list the licensure examination pass rate.	Not Applicable.
3.12 What current articulation or cooperative agreements/initiatives are in place for this program?	Program articulation agreements exist with Northern Illinois University and Southern Illinois University. https://www.waubonsee.edu/programs-courses/transfer-programs/transferring-credit-waubonsee/articulation-agreements **Articulated Credit:** Valley Education for Employment System (VALEES) http://valees.org/early_college_credit_draft.aspx

3.13 Have partnerships been formed since the last review that may increase the quality of the program and its courses? If so, with whom?	In the past five years partnerships with EN Engineering in Warrenville, Illinois and Fermilab in Batavia, Illinois were established.
3.14 What is the faculty to student ratio for courses in this program? Please provide a range and average.	AAS in CAD Course Average Class Size 14.1 Advanced Certificate Course Average Class Size 13.7 Computer Aided Drafting Certificate Average Class Size 15.6
3.15 What professional development or training is offered to adjunct and full time faculty that may increase the quality of this program?	Waubonsee provides face-to-face training sessions, e-learnings, job aids and one-on-one appointments to all employees of the college. Topics include Blackboard training and support, instructional design, classroom management strategies. In addition, a three day orientation is offered for faculty at the beginning of each semester which provides professional development opportunities. Full-time faculty are also provided with professional development funds to attend program specific meetings and conferences provided by outside organizations. Several new positions were recently created to focus on faculty development at the college. These include a Dean of Faculty Development, an Assistant Dean for Online Learning and Flexible Delivery and three faculty liaisons to focus on Faculty Development and engagement.

3.16 What is the status of the current technology and equipment used for this program?	The program manages three classrooms: one is located in the Henning Computing Center and two are located in Akerlow Hall. The Henning classroom has 20 workstations with dual monitors, the Akerlow classrooms have 15 workstations, and 12 workstations (Note: Akerlow classrooms have single monitors). The goal is to have dual monitors in all class room. One of the Akerlow classrooms also has four 3D printers, a 3D scanner and a laser cutter. Every year the equipment is evaluated, and additions are made. All CAD software is loaded in every classroom. There are three PCs in a Henning lab in addition to the classroom and the Aurora campus computer lab has one computer with all the CAD software. To support the newly created courses, an additional room with 15 workstations has been requested for the 2018-2019 school year.
3.17 What assessment methods are used to ensure student success?	The program uses final exams with a standardized rubric by class to evaluate the achievement of the course outcomes. These final exams are engineering drawings that are course specific.
3.18 How satisfied are students with their preparation for employment?	CTE graduates' satisfaction with their preparation for employment was last measured by the ICCB mandated Career and Technical Education Follow-up Survey (ICCB FS submission) in 2016 for 2015 graduates. Since the CTE Survey is no longer mandated or collected by ICCB, WCC is developing a new Alumni Survey which will be administered annually beginning one year post-graduation. The intent is to capture long-range outcomes, including data about satisfaction with WCC's preparation for their employment.

3.19 How is student satisfaction information collected?	WCC uses two institutional level surveys to measure student satisfaction indicators: the Student Satisfaction Inventory (SSI) and the Community College Survey of Student Engagement (CCSSE). In addition, a graduating student survey was piloted in 2017. In spring 2018 the survey will be administered to all students completing petitions to graduate.
3.20 How are employers engaged in this program? (e.g. curriculum design, review, placement, work-based learning opportunities)	The Computer Aided Design and Drafting program has developed an Advisory Council of area professionals. The members of this council are provided with copies of course requirements, program outcomes, and designated time to tour and review the technology resources necessary for effective student learning.
3.21 How often does the program advisory committee meet?	The advisory committee meets annually with a goal to meet twice per year.
3.22 How satisfied are employers in the preparation of the program's graduates?	Based on informal conversations with employers on the advisory board, graduates are prepared and employers are satisfied. However, we do not have documented evidence to support this claim. One goal for us this year is to address the need for an employer survey and addition including an assessment tool at internship sites.
3.23 How is employer satisfaction information collected?	The CAD program benefits from the input of district employers through advisory committee meetings and internship placement.

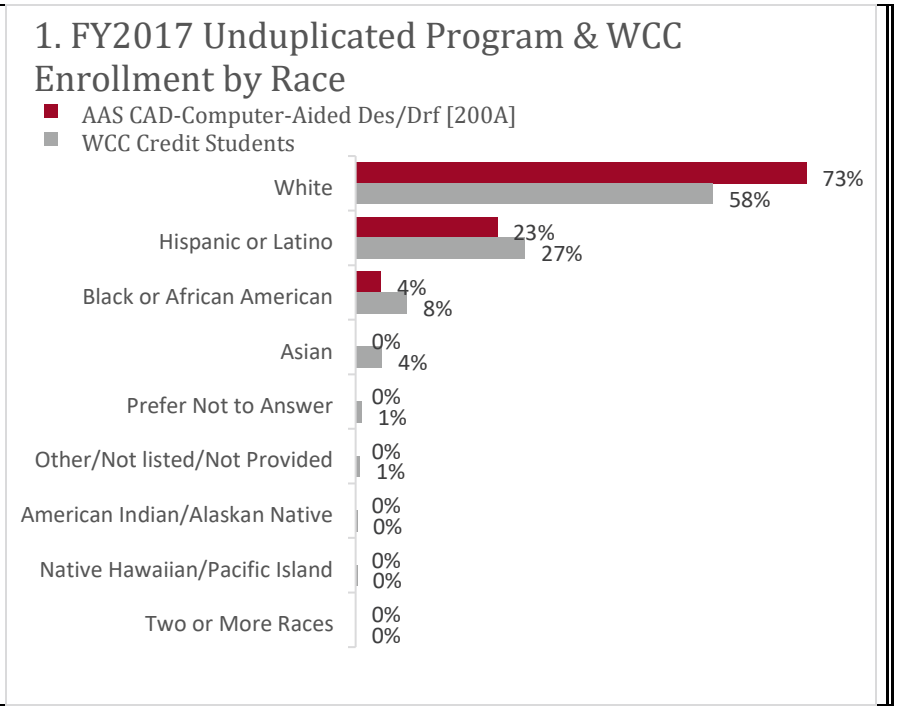
3.24 Did the review of program quality result in any actions or modifications? Please explain.	The review of program quality did not result in any actions or modifications.

DATA ANALYSIS FOR CTE PROGRAM REVIEW

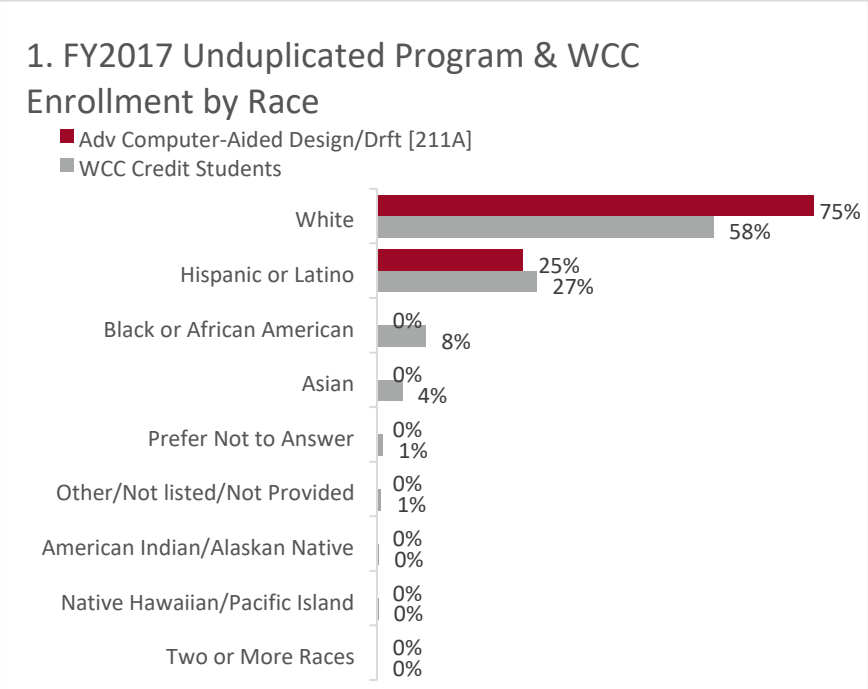
Please complete for each program reviewed. Colleges may report aggregated data from the parent program or report on enrollment and completion data individually for each certificate within the program. Provide the most recent 5 year longitudinal data available.

CTE PROGRAM	Computer Aided Design and Drafting				
CIP CODE	15.1302				
	YEAR 1 (FY13)	*YEAR 2 (FY14)*	*YEAR 3 (FY15)*	*YEAR 4 (FY16)*	*YEAR 5 (FY17)*
NUMBER OF STUDENTS ENROLLED	AAS 32 Cert 0	AAS 43 Cert 0	AAS 39 Cert 0	AAS 44 Cert 0	AAS 48 Cert 4
NUMBER OF COMPLETERS	AAS 2 Cert 0	AAS 5 Cert 0	AAS 6 Cert 0	AAS 3 Cert 0	AAS 10 Cert 13

OTHER (PLEASE IDENTIFY)					
How does the data support the program goals? Elaborate.	WCC has not determined program goals in the area of enrollment and completion and current goals are based on total credit enrollment. By defining program goals as part of our continuous improvement process, beginning in fall 2018, program admission goals will be implemented.				
What disaggregated data was reviewed?	The data set reviewed consisted of students who selected the CAD program of study. The data was retrieved from the Advance Data Warehouse and sourced from Banner.				
Were there gaps in the data? Please explain.	Students are provided the opportunity to select their program of study on the New Student Information Form (NSIF) upon entry at WCC. Students can change program major declaration at any time online. There may have been students not included in the analysis, because the CAD major was not selected even though the associated coursework was completed.				
What is the college doing to overcome any identifiable gaps?	Waubonsee is reviewing our intake process and analyzing how major codes are defined and updated when students change their program of study from their initial selection on the New Student Information Form.				
Are the students served in this program representative of the total student population? Please explain.	AAS CAD-Computer-Aided Des/Drf [200A] This program's enrollment disproportionately has more White students with the largest representation from White students and the second largest population from Hispanic or Latino students.				

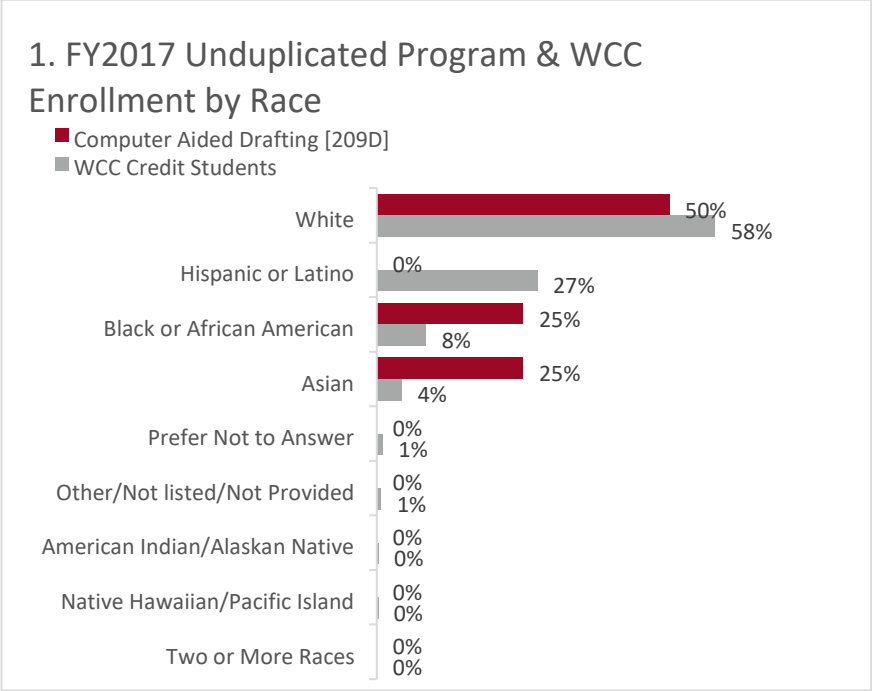


Adv Computer-Aided Design/Drft [211A]
There are too few students in this major to compare to the overall WCC population.

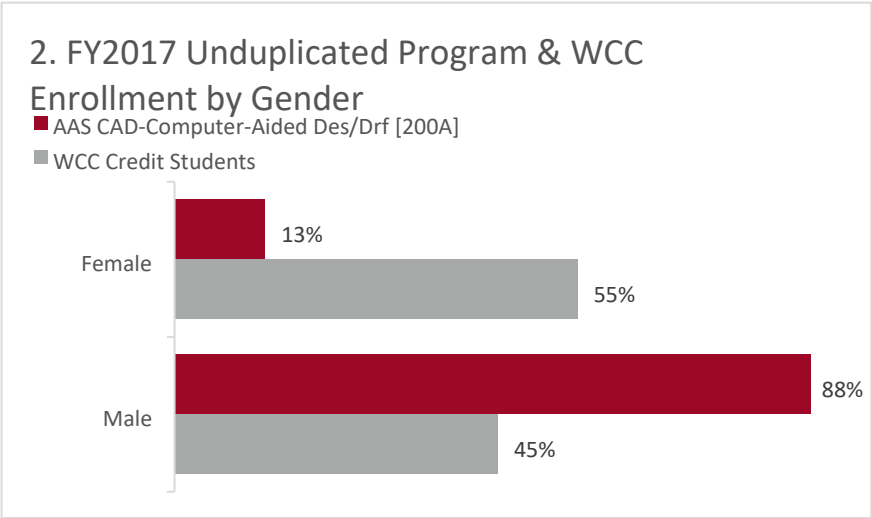


Computer Aided Drafting [209D]

There are too few students in this major to compare to the overall WCC population.



AAS CAD-Computer-Aided Des/Drf [200A]
The program's enrollment is overwhelmingly male compared to the College population.



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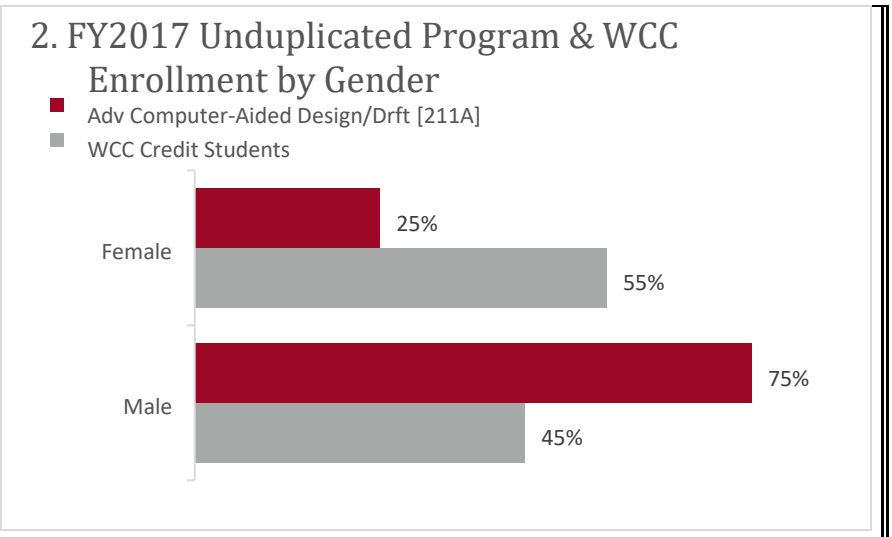

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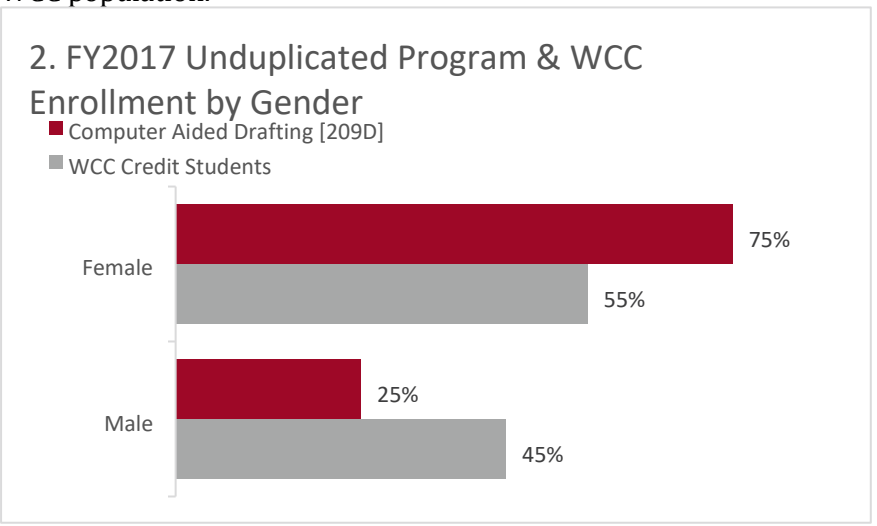
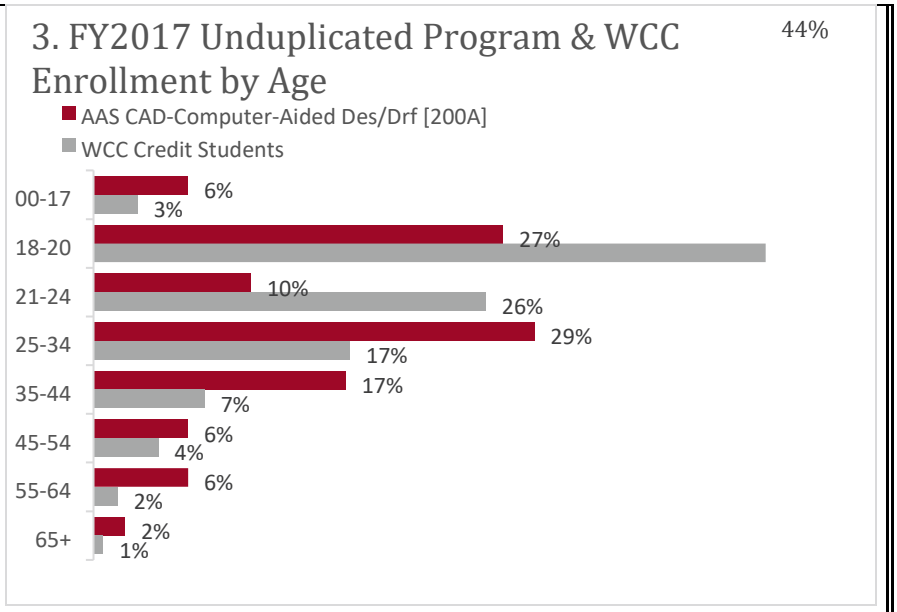


AAS CAD-Computer-Aided Des/Drf [200A]
This program's enrollment disproportionately has fewer 18-20 year olds compared to the college's population and the largest representation is the 25-34 category, which is also disproportionately higher. There are also disproportionately fewer 21-24 year olds.



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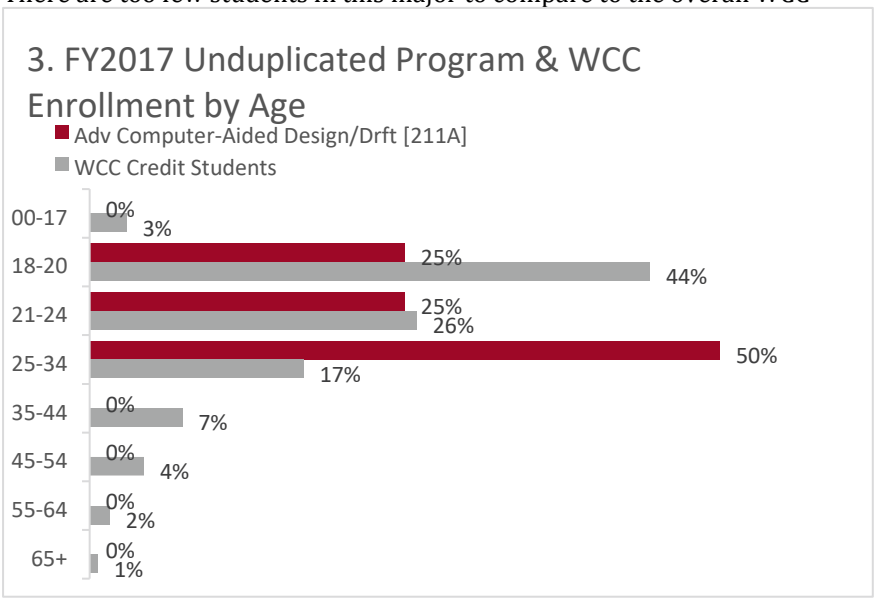

population.

Computer Aided Drafting [209D]
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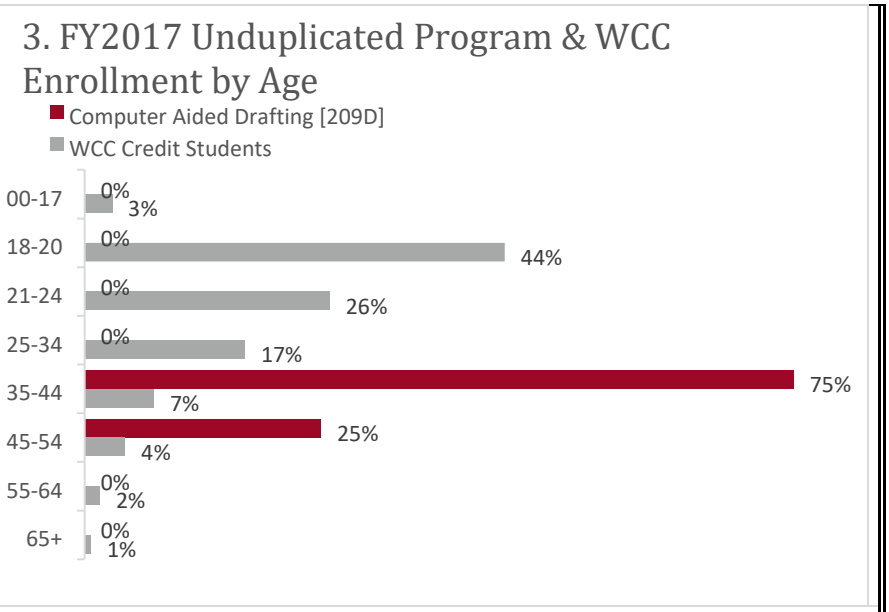
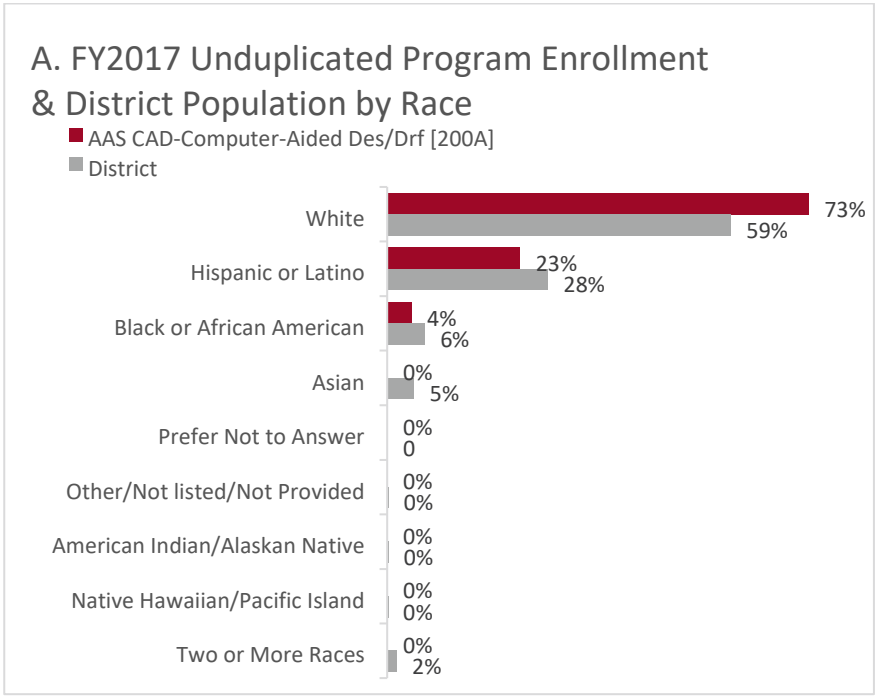


Are the students served in this program representative of the district population? Please explain.	AAS CAD-Computer-Aided Des/Drf [200A] This program's enrollment disproportionately has more White students with the largest representation from White students and the second largest population from Hispanic or Latino students.



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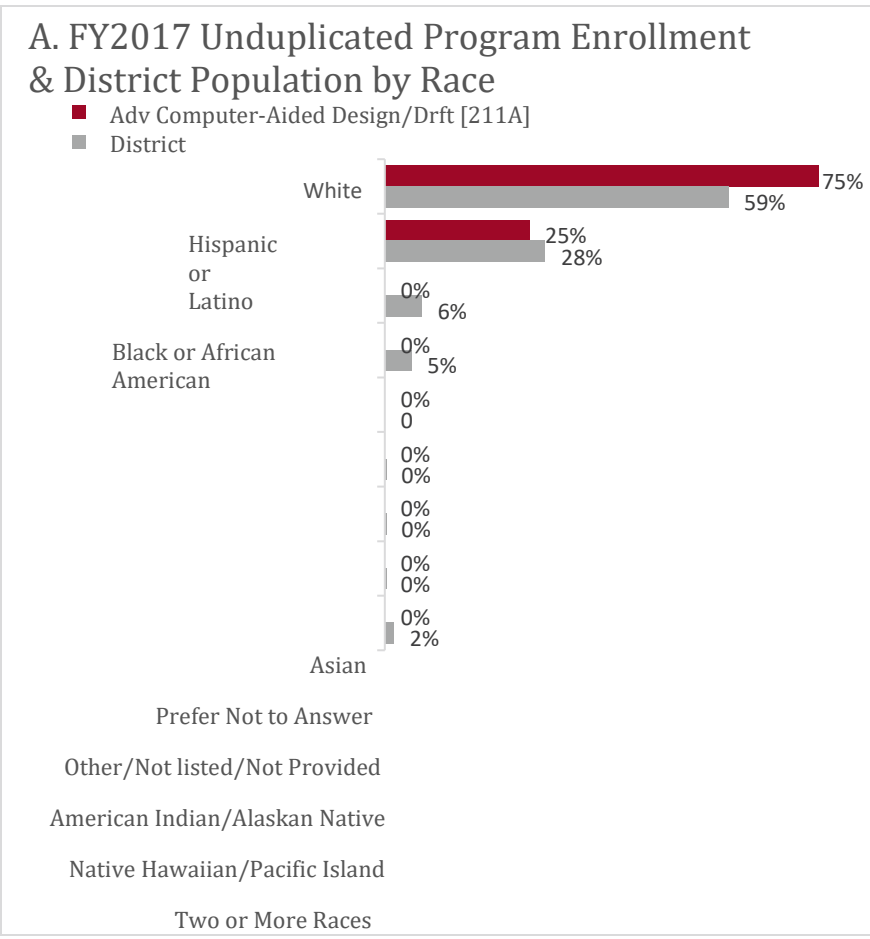
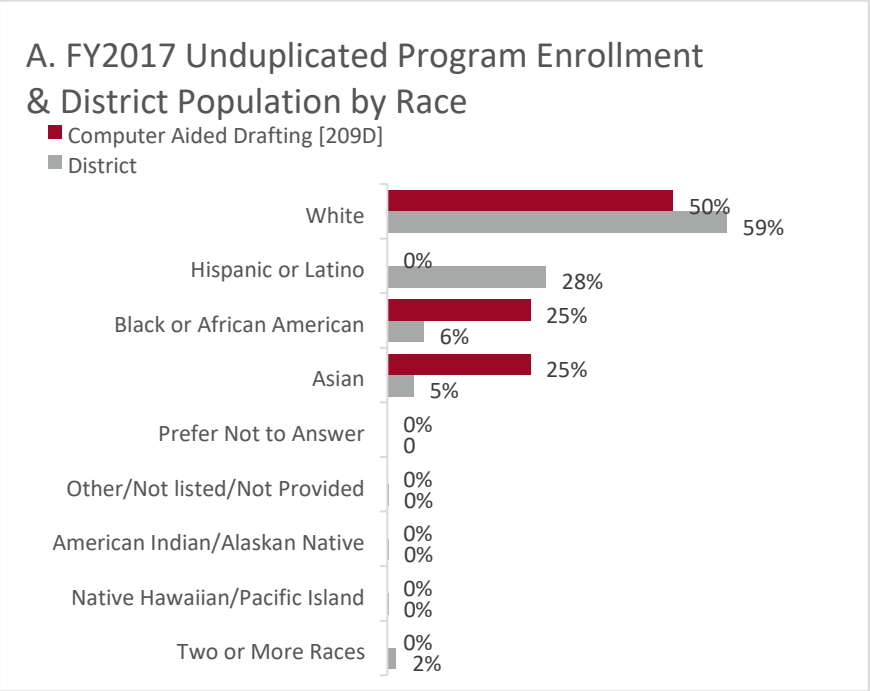
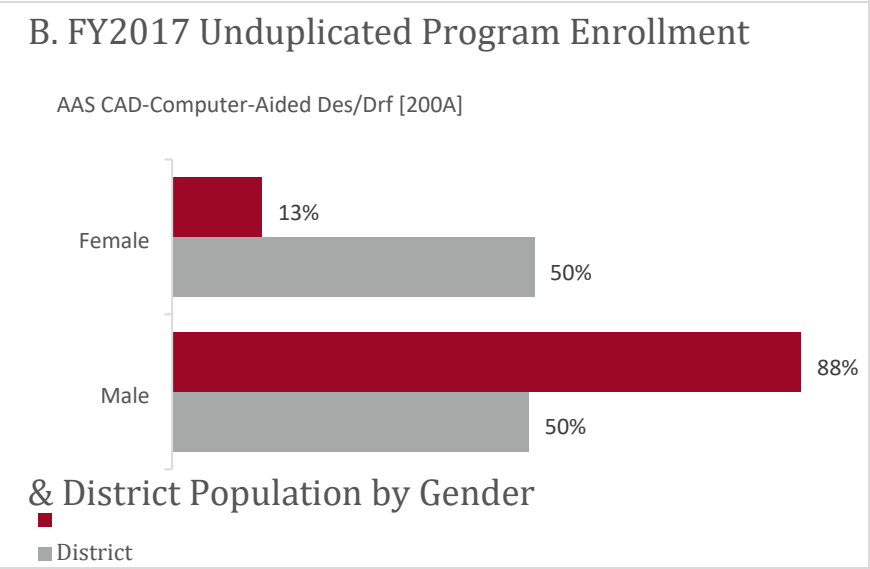

A. FY2017 Unduplicated Program Enrollment & District Population by Race
Adv Computer-Aided Design/Drft [211A]
District
White
75%
59%
Hispanic or Latino
25%
28%
Black or African American
0%
6%
Asian
0%
5%
Prefer Not to Answer
0%
0
Other/Not listed/Not Provided
0%
0%
American Indian/Alaskan Native
0%
0%
Native Hawaiian/Pacific Island
0%
0%
Two or More Races
0%
2%

Computer Aided Drafting [209D]
There are too few students in this major to compare to the overall district



population.

AAS CAD-Computer-Aided Des/Drf [200A]
This program's enrollment is overwhelmingly male compared to the district's population.



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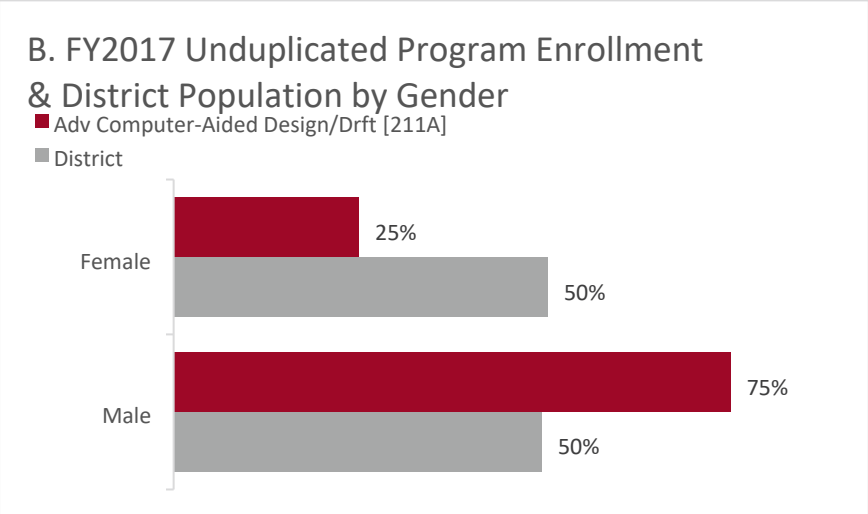

Computer Aided Drafting [209D]
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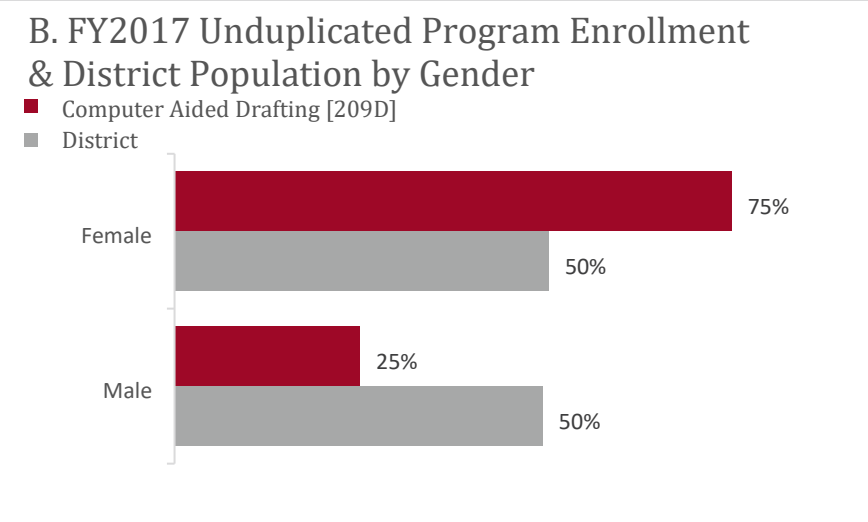
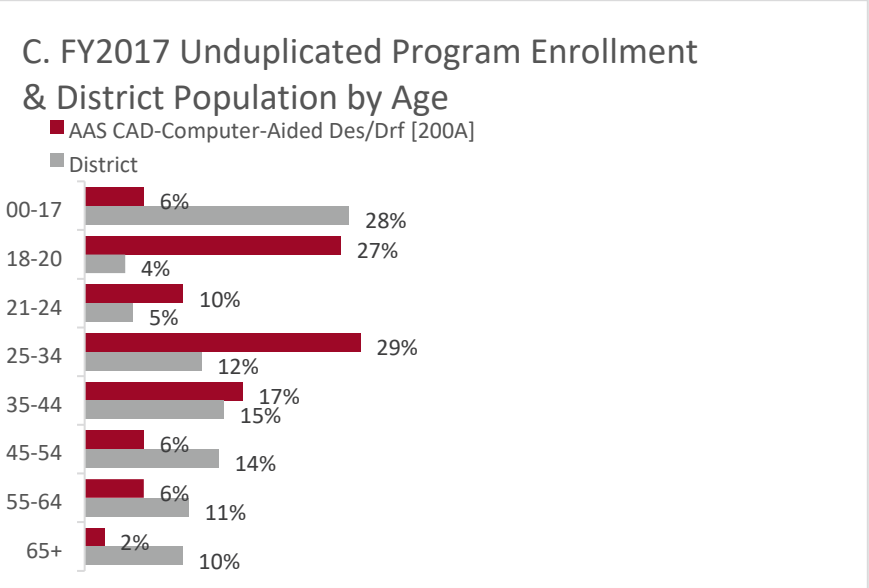


AAS CAD-Computer-Aided Des/Drf [200A]
This program's enrollment disproportionately has fewer 00-17 year olds and more 18-20 and 25-34 year olds. 25-34 year olds are also the largest category compared to the overall district population's largest category of 00-17. This is perhaps a good program for non-traditional students.



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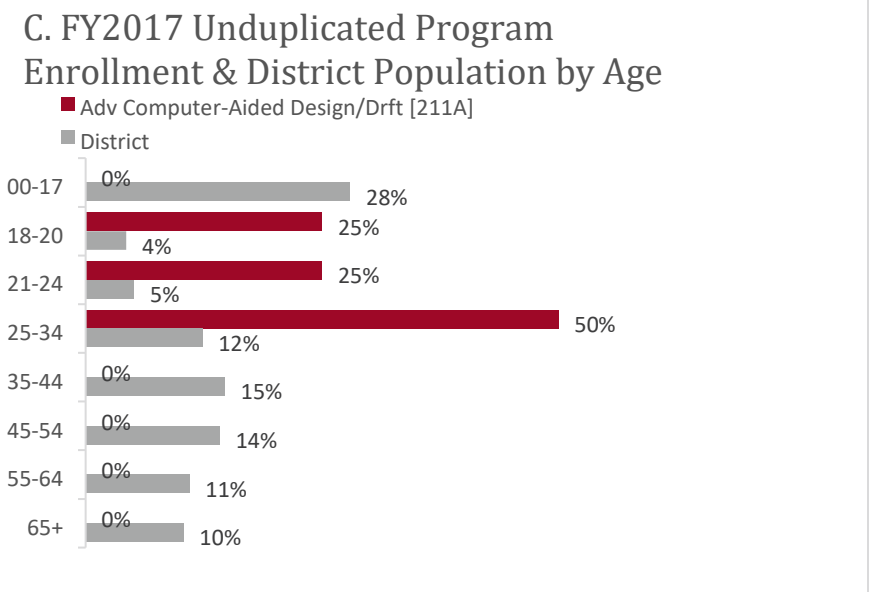
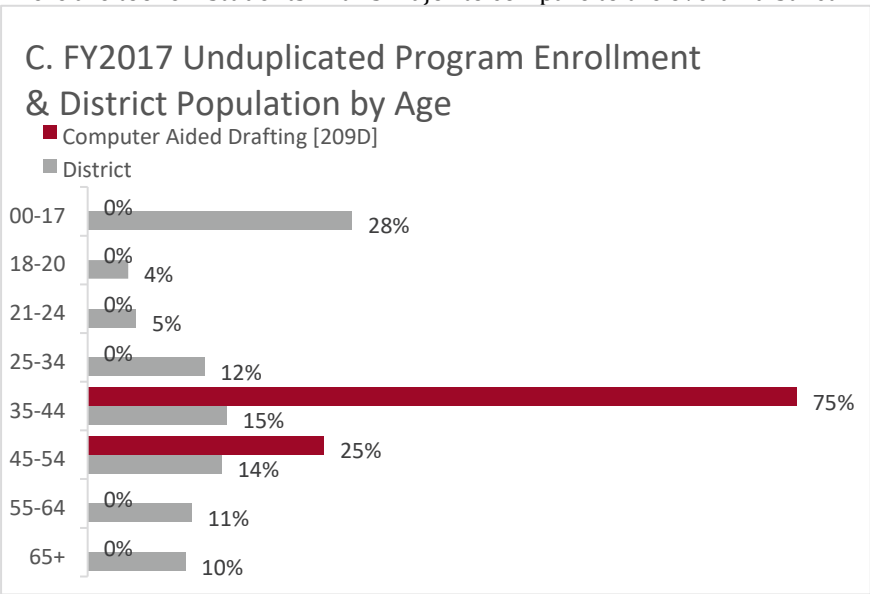


	Computer Aided Drafting [209D] There are too few students in this major to compare to the overall district  population.
REVIEW RESULTS	
Action	☒ Continued with Minor Improvements ☐ Significantly Modified ☐ Placed on Inactive Status ☐Discontinued/Eliminated ☐ Other (please specify)
Summary Rationale Please provide a brief rationale for the chosen action.	The employment of drafters is expected to grow 7% from 2016 to 2026. Increased construction activity across the US is projected to drive demand for drafters. Curriculum was introduced last year that will become effective fall 2018 with an architectural and mechanical CAD certificate. Both certificates have excellent potential for student employability within the field. There is expected to be 2,260 job opportunities in Illinois for drafters through 2024. There is great value for students who obtain the CAD AAS degree, because employees with associate's degrees in CAD make up the largest percentage of the workforce (33%).
Intended Action Steps What are the action steps resulting from this review? Please detail a timeline and/or dates for each step.	During the next academic year, the Advisory Committee will be strengthened to create additional opportunities for students. 1. Identify industry contacts and high school instructors to serve on the committee. 2. Formalize the committee's goals and objectives. 3. Schedule meeting in the fall 2018 with a second meeting for spring 2019 In addition, for the fall 2018 semester, a list of needs will be created for rooms, equipment and space. This will be assessed for the next 1-3 years.

Career & Technical Education	
College Name:	Waubonsee Community College
Fiscal Year in Review:	2017-2018

Program Identification Information

Program Title	*Degree or Cert*	*Total Credit Hours*	*6-Digit CIP Code*	*List All certificate programs that are stackable within the parent degree*
Construction Management	**Degree**	**60**	**52.2001**	**Construction Management Certificate**

Address all fields in the template. If there are certificates and/or other stackable credentials within the program, please be sure to specify and sufficiently address all questions regarding each stackable credential.

Program Objectives What are the outcomes of the program?	1. Read and interpret construction prints. 2. Locate and review technical specifications. 3. Recognize construction materials and methods. 4. Analyze ethical and legal issues in the construction industry. 5. Use management concepts and theories to make construction related decisions.
To what extent are these outcomes being achieved?	Based on individual course assessment, we believe that these outcomes are being achieved. This academic year we are collection information in the aggregate and will have documented evidence of achievement to make curriculum improvements if necessary.
Past Program Review Action What action was reported last time the program was reviewed?	Continued with Minor Improvements

CTE Program Review Analysis

Complete the following fields and provide concise information where applicable. Please do not insert full data sets but summarize the data to completely answer the questions. Concise tables displaying this data may be attached. The review will be sent back if any of the below fields are left empty or inadequate information is provided.

List all pre-requisites for this program (courses, placement scores, etc.).	Although many of the courses have a recommended prerequisite, None of the 60 credits require prerequisites to enroll in a course.

Please list or attach all required courses (including titles) for completion of this program including institution required courses (e.g. student success, first year, general education requirements, etc.).	**Construction Management** Associate in Applied Science Degree *(730B) major code* The Construction Management Program provides students with the fundamental principles, practices and processes of construction management. General Education Requirements.....18 COM 121 ***or*** COM 100 Communications.....3 ECN 100 ***or*** ECN 201 Economics.....3 ENG 101 ***or*** ENG 152 English.....3 ENG 102 ***or*** ENG 153 English.....3 Mathematics elective•.....3 Physical Science elective•.....3 Construction Management Major Program Requirements.....21 CMT 101 The Construction Industry.....3 CMT 105 Print Reading for Construction.....3 CMT 111 Construction Materials and Methods I.....3 CMT 115 Construction Materials and Methods II.....3 Select 9 semester hours from the following CMT courses: CMT 121 Sustainable Construction and Design Principles.....3 CMT 201 Codes, Contracts and Specifications.....3 CMT 210 Construction Estimating.....3 CMT 215 Contract and Project Administration.....3 CMT 225 Construction Project Management.....3 CMT 230 Construction Safety and Health.....3 CMT 240 Construction Surveying.....3 Additional Program Requirements.....15 ACC 101 ***or*** ACC 202 Accounting.....3 BUS 100 Introduction to Business.....3 BUS 210 ***or*** BUS 211 Business Law.....3 CIS 110 Business Information Systems.....3 MGT 210 ***or*** MGT 200 Management.....3 Electives.....6 Select electives from: Accounting (ACC), Business Administration (BUS), Computer Aided Design and Drafting (CAD), Computer Information Systems (CIS), Construction Management (CMT), Heating, Ventilation and Air Conditioning (HVA), Industrial Technology (IDT), Internship (ITS), Machine Tool Technology (MTT), Management (MGT), Marketing (MKT), Real Estate (REL), Welding Technology (WLD), World Wide Web (WEB). **PROGRAM TOTAL.....60**
Provide a rational for content/credit hours beyond 30 hours for a certificate or 60 hours for a degree.	Not Applicable.
INDICATOR 1: NEED	***RESPONSE***

1.1 How strong is the occupational demand for the program?	In 2015, there were 299 annual openings and with 59 regional program completions. The completions exceed the openings. The median hourly earnings for this position is $30.65 an hour which is $18.12 higher than the living wage for our community.
1.2 How has demand changed in the past five years and what is the outlook for the next five years?	Between the years of 2013 and 2018, there was a .1% decrease in positions which was 0.7% above the national average Economic modeling data projects the construction management occupations to decrease by 6.1% in the region through 2023.
1.3 What is the district and/or regional need?	Our district and region follow the nation in terms of demand. Counties in our district are expected to lose 81 positions or 3.5% by the year 2023. The decrease in the region is higher at 6.1% with an expected loss of 754 jobs.
1.4 How are students recruited for this program?	CTE students are recruited through a variety of channels. This includes online advertising and print advertising, as well as promoting our CTE programs with high school career counselors.
1.5 Where are students recruited from?	Students are recruited at local high schools and affiliated vocational centers through individual college visits and college fairs. In addition, WCC reaches out to community organizations and local businesses to share information about certificate and degree programs. Opportunities are available for those interested to tour the facilities and learn more about the program.
1.6 Did the review of program need result in actions or modifications? Please explain.	None at this time.
INDICATOR 2: COST EFFECTIVENESS	***RESPONSE***
2.1 What are the costs associated with this program?	The direct costs associated with the program include: • Faculty salary and benefits (full-time and part-time) • Instructional supplies • Technology, software and services • Publications and dues • Full-time faculty professional development
2.2 How do costs compare to other programs on campus?	The costs associated with this program is $1,712.88 per load hour which is 14% less than the institutional average of $2002.00 per load hour.
2.3 How is the college paying for this program and its costs (e.g. grants, etc.)?	The college pays for this program and its costs through tuition and fees.
2.4 If most of the costs are offset by grant funding, is there a sustainability plan in place in the absence of an outside funding source? Please explain.	Not Applicable as the program is supported by institutional funds.
2.5 Did the review of program cost result in any actions or modifications? Please explain.	The review of cost for the Computer Aided Design and Drafting program did not result in any actions or modifications.
INDICATOR 3: QUALITY	***RESPONSE***

3.1 What are the program's strengths?	Waubonsee has experienced CMT instructors, capable of building most any project and training students how to do the same. We also have a broad range of coursework, offering flexibility of choices and experiences for our students. Because our instructors have significant industry experience, WCC students network with professionals just by attending class.
3.2 What are the identified or potential weaknesses of the program?	We need to find a way to recruit and retain more female students, as well as more minority students. We also need to maintain a consistently higher level of enrollments in order to offer more courses and facilitate more timely graduations. Our AAS in CMT is a business degree pathway. We may be able to recruit more students if some of them were able to complete a more CAD focused degree pathway, or a more hands-on focused degree pathway.
3.3 What are the delivery methods of this program? (e.g. traditional format/online/hybrid/team-teaching etc.)?	Traditional face to face format.
3.4 How does this program fit into a career pathway?	Construction Management.
3.5 What innovations have been implemented or brought to this program that other colleges would want to learn about?	Hands on projects, developed by the students, and accompanying binders of their research work along with presentations, to assess and demonstrate their learning about various methods and materials available and suitable for constructing a residential dwelling or light commercial building. The majority of innovations relate to in class research and assignments.
3.6 Are there dual credit opportunities? If so please list offerings and the associated high schools.	Dual credit is offered for this degree. This includes general ed. requirements such as COM (Communications) and ENG (English) as well as for additional program requirements such as CIS 110 - Business Information Systems.
3.7 What work-based learning opportunities are available and integrated into the curriculum?	We offer internships with various construction industry employers whereby students can gain both experience as well as academic credit commensurate with that experience. We also try to connect students with prospective construction industry employers while they are still taking courses at the college.
3.8 Is industry accreditation required for this program (e.g. nursing)? If so, identify the accrediting body. Please also list if the college has chosen to voluntarily seek accreditation (e.g. automotive technology, NATEF).	Industry accreditation was not required for this program for this time frame.
3.9 Are industry-recognized credentials offered? If so, please list.	Credentials for this degree include the OSHA 30 card (Construction Safety) and the 608 certification (Refrigerant Transition).
3.10 Is this an apprenticeship program? If so, please elaborate.	This program is not an apprenticeship program.

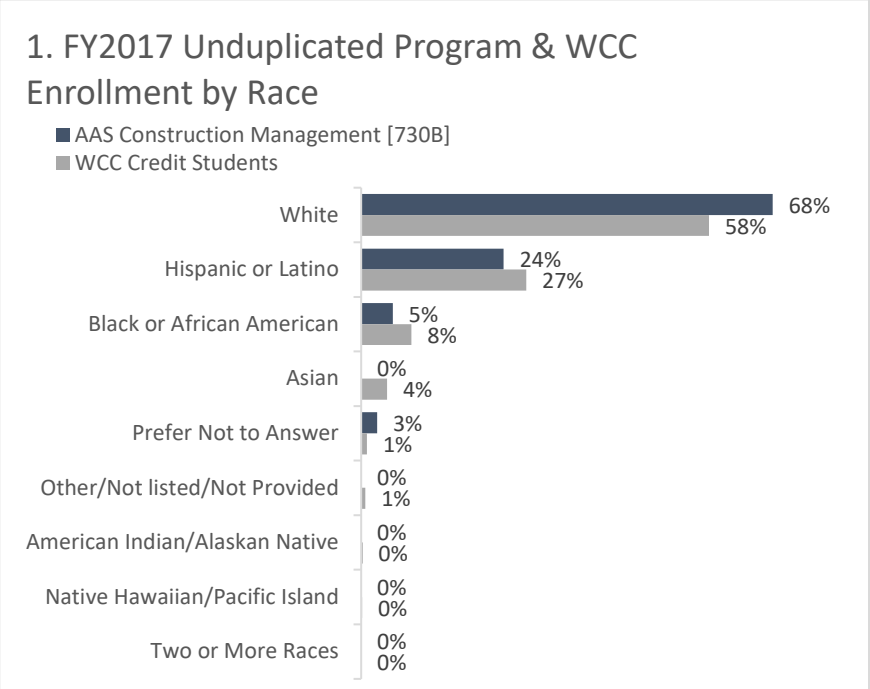
3.11 If applicable, please list the licensure examination pass rate.	Students pursue the OSHA 30 card and 608 certification on their own (independently) from different organizations. Therefore, we do not have pass rates for theses certifications.
3.12 What current articulation or cooperative agreements/initiatives are in place for this program?	N/A
3.13 Have partnerships been formed since the last review that may increase the quality of the program and its courses? If so, with whom?	We had worked with the Chicago Regional Council of Carpenters on curriculum alignment to explore the development of a Construction Technology Professional AAS.
3.14 What is the faculty to student ratio for courses in this program? Please provide a range and average.	Total End of Term Program Enrollment 65.00 Courses In Program (Ran FY2017) 4.0 Min Course Average Class Size 10.0 Max Course Average Class Size 25.0 Average of Course Average Class Size 16.3
3.15 What professional development or training is offered to adjunct and full time faculty that may increase the quality of this program?	Waubonsee provides face-to-face training sessions, e-learnings, job aids and one-on-one appointments to all employees of the college. Topics include Blackboard training and support, instructional design, classroom management strategies. In addition, a three day orientation is offered for faculty at the beginning of each semester which provides professional development opportunities. Full-time faculty are also provided with professional development funds to attend discipline specific meetings and conferences provided by outside organizations. Several new positions were recently created to focus on faculty development at the college. These include a Dean of Faculty Development, an Assistant Dean for Online Learning and Flexible Delivery and three faculty liaisons to focus on Faculty Development and engagement.
3.16 What is the status of the current technology and equipment used for this program?	We have multiple computer labs available for classroom sessions as well as student research. (Do we know if it is up to date? Is there other types of equipment other than computer labs?). The computers and software used in these classrooms is updated by our by IT department on a regular schedule.
3.17 What assessment methods are used to ensure student success?	Multiple-choice, fill-in-the-blank, true-false, and short answer test questions, as quizzes, mid-terms and final exams are common throughout the program. There are also periodic homework assignments, involving reading and writing or answering relevant questions. Also, there are many project based assessments, such as a project portfolio to research and select (and orally present on) materials chosen to construct a residence. Another example is hands-on assessment for print reading, as students must demonstrate their competence by actually reading and interpreting the various prints (residential and commercial) placed in front of them.

3.18 How satisfied are students with their preparation for employment?	CTE graduates' satisfaction with their preparation for employment was last measured by the ICCB mandated Career and Technical Education Follow-up Survey (ICCB FS submission) in 2016 for 2015 graduates. Since the CTE Survey is no longer mandated or collected by ICCB, WCC is developing a new Alumni Survey which will be administered annually beginning one year post-graduation. The intent is to capture long-range outcomes, including data about satisfaction with WCC's preparation for their employment.
3.19 How is student satisfaction information collected?	WCC uses two institutional level surveys to measure student satisfaction indicators: the Student Satisfaction Inventory (SSI) and the Community College Survey of Student Engagement (CCSSE). In addition, a graduating student survey was piloted in 2017. Spring 2018 the survey will be administered to all students completing petitions to graduate.
3.20 How are employers engaged in this program? (e.g. curriculum design, review, placement, work-based learning opportunities)	We plan to engage employers through our advisory board. We are in the process of revising our procedure for boards and are currently working with local employers to arrange a meeting. We also engage with employers through our internship programs and career fairs.
3.21 How often does the program advisory committee meet?	We plan for our advisory board to meet initially annual and hope to increase the meetings to two per year.
3.22 How satisfied are employers in the preparation of the program's graduates?	We believe they are satisfied through informal conversations with our internship sites. Waubonsee continues to work on a formal process to survey employer satisfaction.
3.23 How is employer satisfaction information collected?	Employer satisfaction is collected informally at career fairs, and internship sites. We are currently working on an annual employer survey.
3.24 Did the review of program quality result in any actions or modifications? Please explain.	The program review of quality did not result in any actions or modifications.

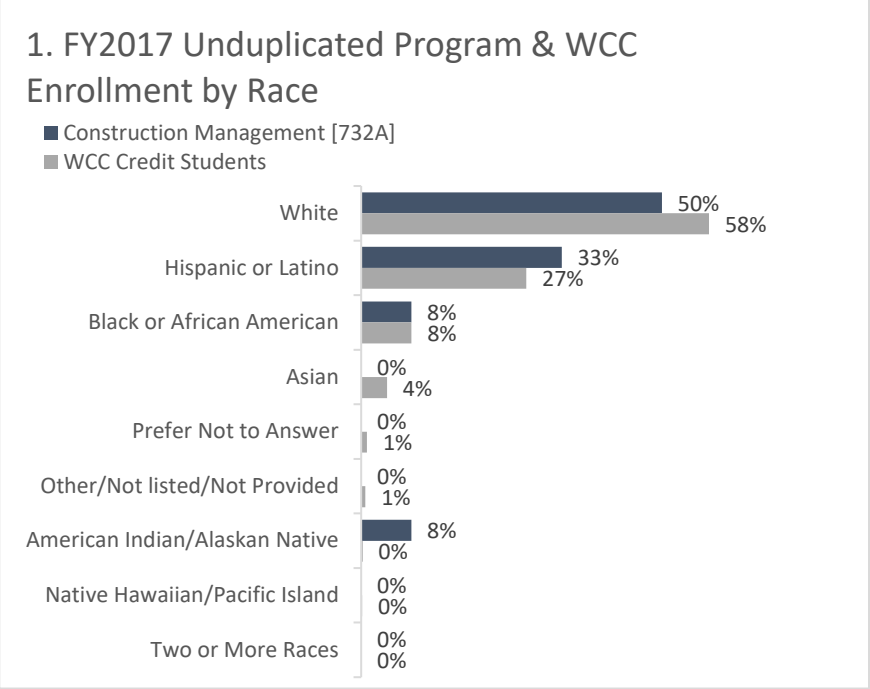
DATA ANALYSIS FOR CTE PROGRAM REVIEW

Please complete for each program reviewed. Colleges may report aggregated data from the parent program or report on enrollment and completion data individually for each certificate within the program. Provide the most recent 5 year longitudinal data available.

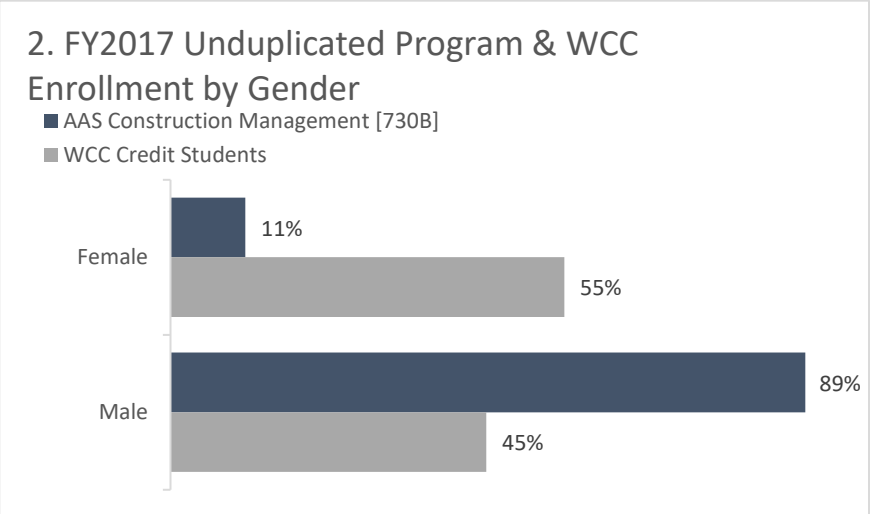
CTE PROGRAM	Construction Management				
CIP CODE	52.2001				
	YEAR 1 (FY13)	*YEAR 2 (FY14)*	*YEAR 3 (FY15)*	*YEAR 4 (FY16)*	*YEAR 5 (FY17)*
NUMBER OF STUDENTS ENROLLED	AAS 20 CERT 5	AAS 20 CERT 9	AAS 21 CERT 6	AAS 28 CERT 7	AAS 38 CERT 12

NUMBER OF COMPLETERS	AAS 5 CERT 0	AAS 2 CERT 1	AAS 1 CERT 0	AAS 1 CERT 1	AAS 4 CERT 4
OTHER (PLEASE IDENTIFY)					
How does the data support the program goals? Elaborate.	Waubonsee has not determined program goals in the area of enrollment and completion. Our current goals are based on total credit enrollment. We are currently defining program goals as part of our continuous improvement process. Beginning fall 2018 we will implement program admissions goals.				
What disaggregated data was reviewed?	Data reviewed was retrieved from the Banner Student System. Students who selected the legal Interpreting as a program of study were included in this report.				
Were there gaps in the data? Please explain.	Students are provided the opportunity to select their program of study on the New Student Information Form (NSIF) upon entry at Waubonsee. Students can change their program at any time online. There may have been students not included in the analysis because they did not select construction management as their program of study.				
What is the college doing to overcome any identifiable gaps?	Waubonsee is reviewing our intake process to increase the accuracy of major definitions without impeding access.				
Are the students served in this program representative of the total student population? Please explain.	AAS Construction Management [730B] This program's enrollment aligns with the college's population with the largest representation from White students and the second largest population from Hispanic or Latino students.  Construction Management [732A] This program's enrollment aligns with the college's population with the largest representation from White students and the second				

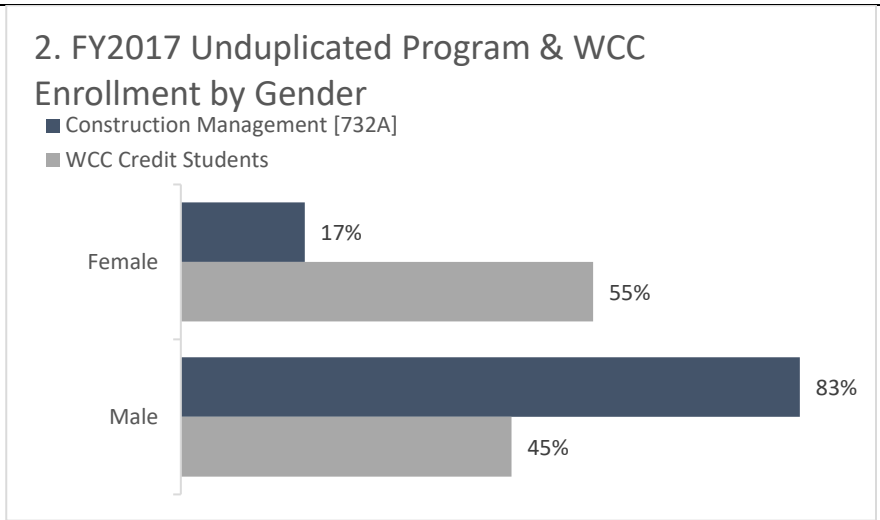
largest population from Hispanic or Latino students.



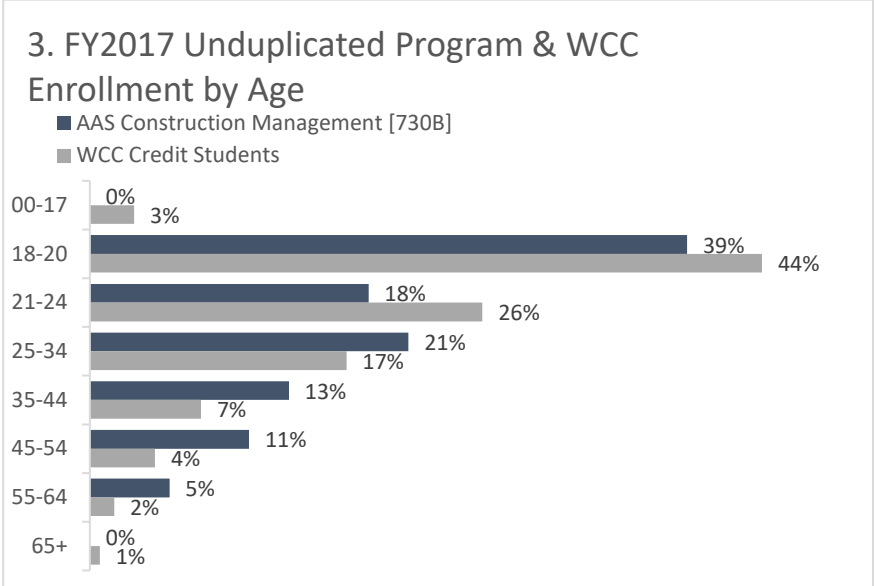
AAS Construction Management [730B]
The program's enrollment is overwhelmingly male compared to the college's population.



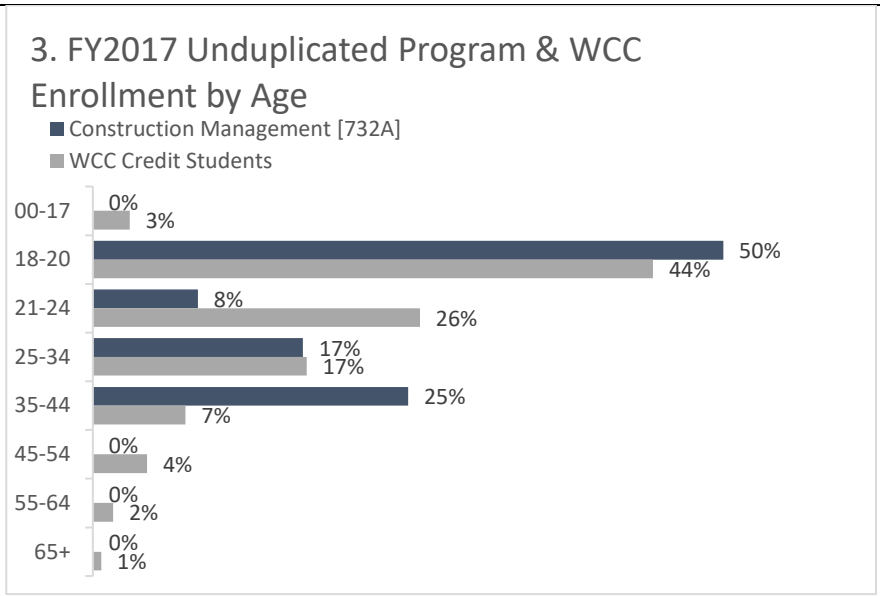
Construction Management [732A]
The program's enrollment is overwhelmingly male compared to the college's population.



AAS Construction Management [730B]
This program's enrollment aligns with the college's population with the largest representation from 18-20 year old students, though the second largest population is from 25-34 year old students.

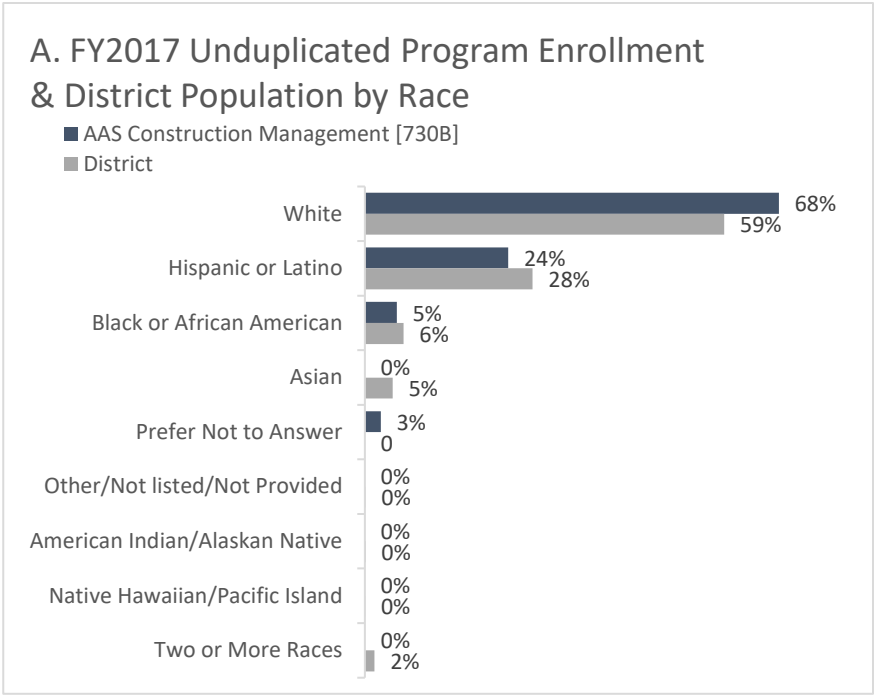


Construction Management [732A]
This program's enrollment aligns with the college's population with the largest representation from 18-20 year old students, though the second largest population is from 35-44 year old students.

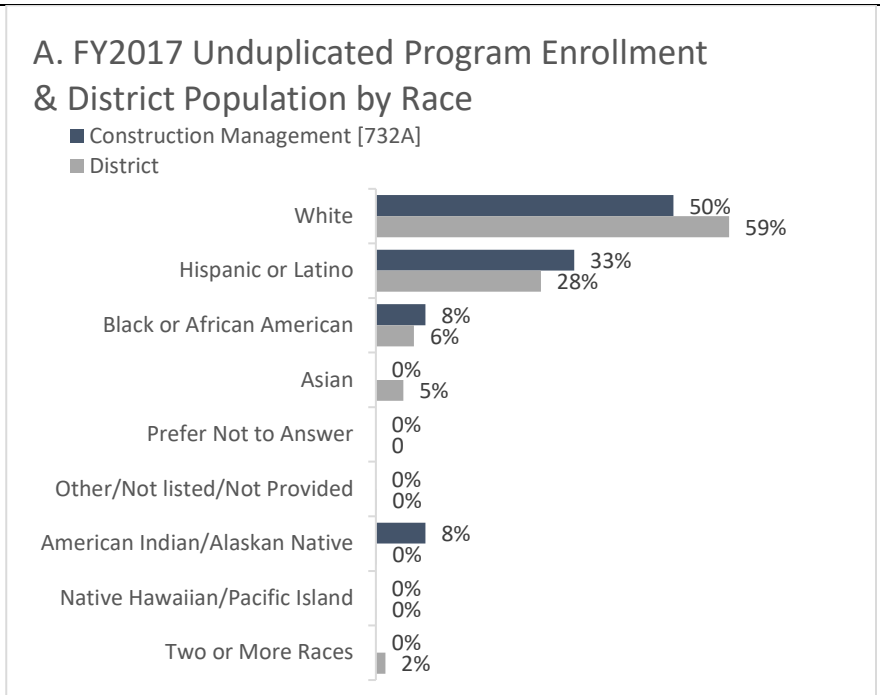


Are the students served in this program representative of the district population? Please explain.

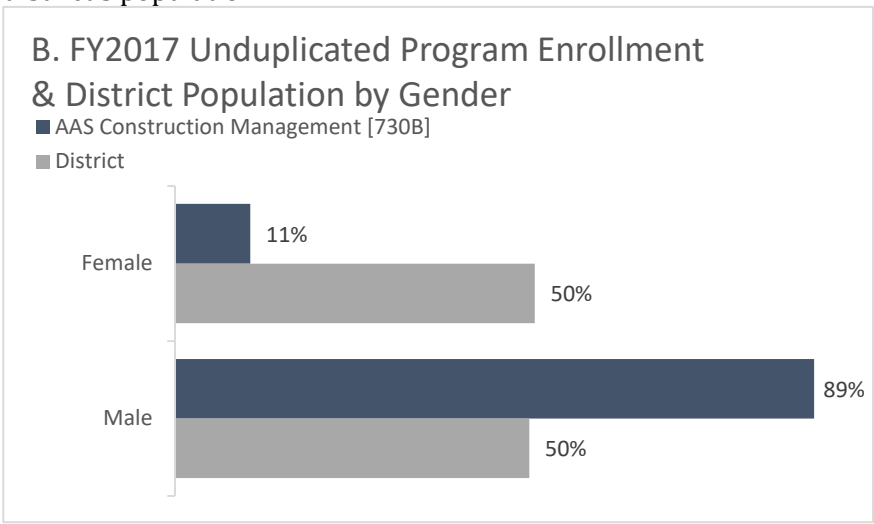
AAS Construction Management [730B]
This program's enrollment aligns with the district's population with the largest representation from White students and the second largest population from Hispanic or Latino students.



Construction Management [732A]
This program's enrollment aligns with the district's population with the largest representation from White students and the second largest population from Hispanic or Latino students.



AAS Construction Management [730B]
This program's enrollment is overwhelmingly male compared to the district's population.



Construction Management [732A]
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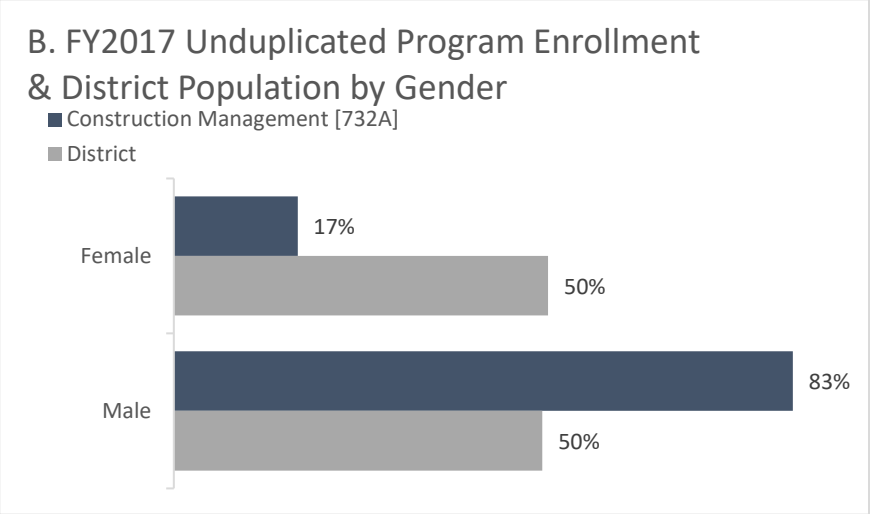
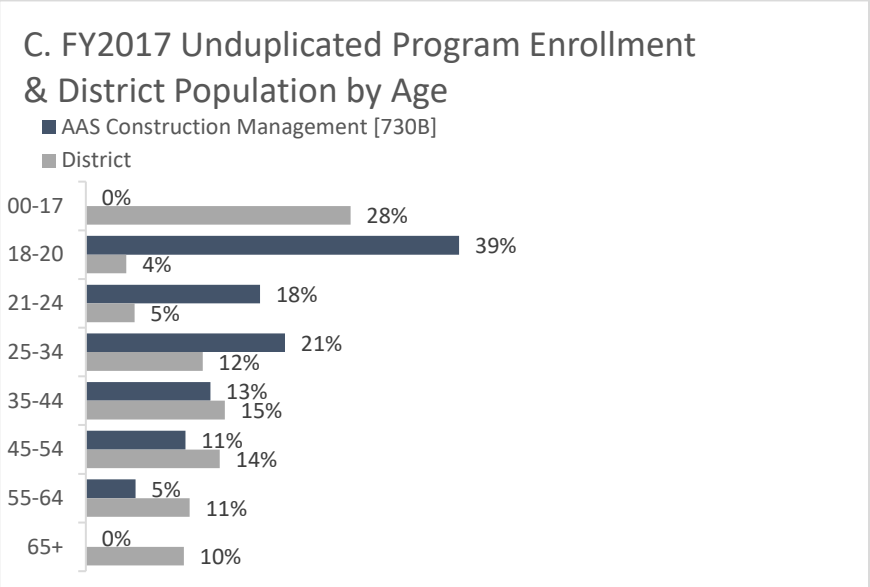
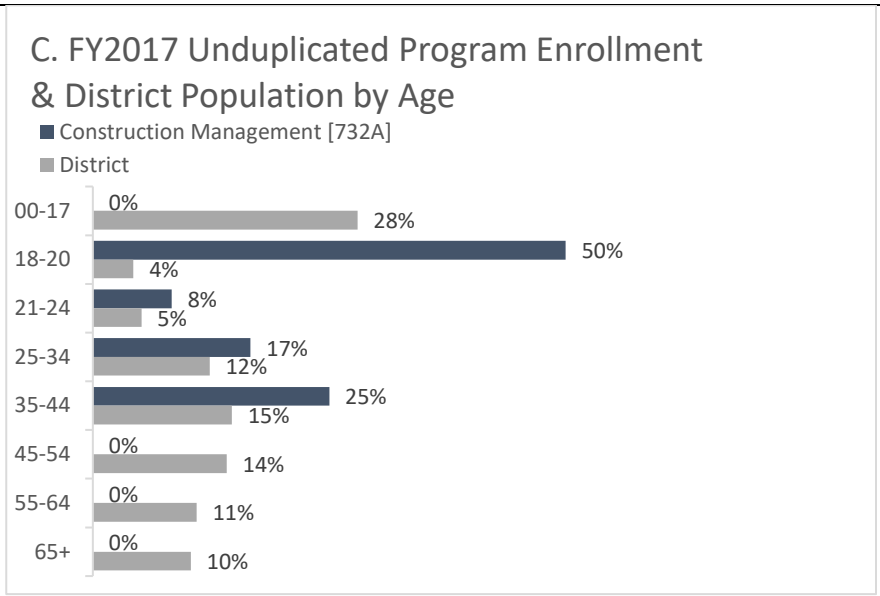


AAS Construction Management [730B]
This program's enrollment disproportionately has fewer 00-17 year olds and more 18-20 and 21-24 year olds. 18-20 year olds are also the largest category compared to the overall district population's largest category of 00-17.



Construction Management [732A]
This program's enrollment disproportionately has fewer 00-17 year olds and more 18-20 year olds. 18-20 year olds are also the largest category compared to the overall district population's largest category of 00-17.



REVIEW RESULTS	
Action	☒ Continued with Minor Improvements ☐Significantly Modified ☐Placed on Inactive Status ☐Discontinued/Eliminated ☐Other (please specify)
Summary Rationale Please provide a brief rationale for the chosen action.	While there is a regional decline in employment, on a national level, there will be an additional 11,380 jobs added through 2024. The program offers a solid combination of construction, business, accounting and management courses.
Intended Action Steps What are the action steps resulting from this review? Please detail a timeline and/or dates for each step.	1. Create and begin offering a new Institutional Challenge Exam covering CMT105 Print Reading for Construction to make credit for prior learning available to those students who have through some prior learning experience already become proficient in print reading for light commercial construction. Complete by May 2019. 2. Offer more opportunities for CMT students to complete their degree and certificate faster, such as offering CMT101 both Fall and Spring semesters. Complete by May 2019 3. Use data to better understand our CMT students' enrollment and degree and certificate completion habits, as well as program elective selection and create a programmatic marketing plan. Complete by December 2019 and on-going. 4. Increase employer engagement by holding two advisory committee meetings within FY19 to discuss curriculum design, review, placement and work-based learning opportunities. Complete by May 2019.

Career & Technical Education

College Name:	Waubonsee Community College
Fiscal Year in Review:	2017-2018

Program Identification Information

Program Title	*Degree or Cert*	*Total Credit Hours*	*6-Digit CIP Code*	*List All certificate programs that are stackable within the parent degree*
Fire Officer I	**Cert**	**42**	**43.0202**	**Fire Fighter Certificate**

Address all fields in the template. If there are certificates and/or other stackable credentials within the program, please be sure to specify and sufficiently address all questions regarding each stackable credential.

Program Outcomes What are the overarching objectives/goals of the program?	1. Describe the laws related to fire science. 2. Apply incident management skills to emergency scenes. 3. Demonstrate problem solving skills integral to success in the fire service. 4. Discuss ethical situations applicable to the fire science workplace. 5. Describe the interpersonal communication skills necessary for success a fire science career.
To what extent are these outcomes being achieved?	We are beginning to gather assessment data on our program this spring 2018. Based on other types of assessments: certification pass rates and meeting the Office of the State Fire marshal objectives, our students are meeting our program outcomes.
Past Program Review Action What action was reported last time the program was reviewed?	Continued with Minor Improvements

CTE Program Review Analysis

Complete the following fields and provide concise information where applicable. Please do not insert full data sets but summarize the data to completely answer the questions. Concise tables displaying this data may be attached. The review will be sent back if any of the below fields are left empty or inadequate information is provided.

List all pre-requisites for this program (courses, placement scores, etc.).

Course	Prerequisite
FSC115 Basic Operations Firefighter Module B	FSC105 Basic Operations Firefighter Module A
FSC118 Basic Operations Firefighter Module C	FSC115 Basic Operations Firefighter Module B

Please list or attach all required courses (including titles) for completion of this program including institution required courses (e.g. student success, first year, general education requirements, etc.).	This certificate is designed for those wishing to pursue a career in fire science as an officer. Course Requirements FSC 105 Basic Operation Firefighter Module A.....4 FSC 115 Basic Operation Firefighter Module B.....4 FSC 118 Basic Operation Firefighter Module C.....4 FSC 120 Hazardous Materials Operations.....3 FSC 125 Advanced Technician Firefighter.....4 FSC 140 Fire Apparatus Engineer.....4 FSC 150 Vehicle and Machinery Operations.....3 FSC 160 Tactics and Strategy I.....3 FSC 170 Fire Science Instructor I.....3 FSC 215 Technical Rescue and Vehicle Operations.....1 FSC 220 Fire Inspection and Prevention.....3 FSC 231 Fire Science Administration I.....3 FSC 232 Fire Science Administration II.....3 **PROGRAM TOTAL.....42**
Provide a rational for content/credit hours beyond 30 hours for a certificate or 60 hours for a degree.	This certificate aligns with the Office of State Fire Marshal's Fire Officer I certification. It is over 30 hours due to requirements of the Office of the State Fire Marshal (OSFM). Five courses are required for this industry certification: FSC160, FSC170, FSC220, FSC231 and FSC232. The other courses listed are the OSFM required prerequisites for the industry certification.
INDICATOR 1: NEED	***RESPONSE***
1.1 How strong is the occupational demand for the program?	The Fire Officer I certificate program enrollment has continued to remain stable but low the past five years with an average enrollment of 2 students. Trends regionally according to economic data indicate an increase in jobs by 21 positions or 0.8% between 2018 and 2023. Data suggests that there will be 13 additional job openings in the counties in Waubonsee's area at this same time. In addition, the median hourly earnings is $49.40 per hour is well above the living wage for our county of $12.53 per hour.
1.2 How has demand changed in the past five years and what is the outlook for the next five years?	According to economic modeling data, there was a 2.3% increase in jobs between the years of 2013 and 2018. The data indicates an addition of 13 additional positions in our counties by 2023.
1.3 What is the district and/or regional need?	Economic Modeling data indicates a projected addition of 13 positions in our district by 2023.

1.4 How are students recruited for this program?	We work with marketing to send out information and we visit local fire departments. To receive the industry certification one must be a fire fighter with five years of experience. Because of this, the credit program has aligned with the previous division of Workforce Development to also offer these classes in a non-credit format that is offered in a schedule that accommodates the non-traditional schedule of working firefighters. The courses in this certificate are electives in the AAS program. Students often complete a portion the Fire Officer I course work as they are completing the degree, so that they have the requisite knowledge for eventual promotion and additional certifications. Once the AAS completer has the requisite five years of experience, they can test for the certificate. As this these classes are an elective for current traditional students, these classes are offered for credit in the program's evening/weekend format.
1.5 Where are students recruited from?	Local Fire Departments in our district. Traditional students that are completing the AAS will complete a portion of this certificate's courses to fulfill their elective obligation.
1.6 Did the review of program need result in actions or modifications? Please explain.	We cannot change courses as they are monitored by the State of Illinois.
INDICATOR 2: COST EFFECTIVENESS	***RESPONSE***
2.1 What are the costs associated with this program?	The direct costs associated with the program include: • Faculty salary and benefits (full-time and part-time) • Instructional supplies • Technology, software and services • Publications and dues • Full-time faculty professional development
2.2 How do costs compare to other programs on campus?	The costs associated with this program is $1,573.77 per load hour which is 22% less than the institutional average of $2002.00 per load hour.
2.3 How is the college paying for this program and its costs (e.g. grants, etc.)?	The college pays for this program and its costs through tuition and fees.
2.4 If most of the costs are offset by grant funding, is there a sustainability plan in place in the absence of an outside funding source? Please explain.	Not Applicable as the program is supported by institutional funds.
2.5 Did the review of program cost result in any actions or modifications? Please explain.	The review of Fire Science did not result in any actions or modifications.
INDICATOR 3: QUALITY	***RESPONSE***

3.1 What are the program's strengths?	Our program faculty are all fire officers including two fire chiefs and a captain. This program has a strong advisory board with a very close connection to industry. Six of the classes in this certificate are offered in local fire departments for no cost. The coursework in this program allows students to complete a portion of the coursework that will be required as they continue to move forward in their professional development.
3.2 What are the identified or potential weaknesses of the program?	The identified weakness of this program is our continued low enrollment.
3.3 What are the delivery methods of this program? (e.g. traditional format/online/hybrid/team-teaching etc.)?	Currently, all our courses are offered in a traditional face to face format. Many courses involve team teaching. Team teaching is the preferred mode of instruction as the instructors are all current firefighters, and thus have 24 hours of work, 48 hours off. As the instructors have rotating schedules, they are paired with another instructor that has the opposite schedule so that they can teach all days of the class. There is only one instructor in the class at a time, but the instructors collaborate to share the benefit of their different experiences.
3.4 How does this program fit into a career pathway?	Career Cluster: Law, Public Safety, Corrections and Security Career Pathway: Emergency and Fire Management Services CIP Program Title: Fire Services Administration
3.5 What innovations have been implemented or brought to this program that other colleges would want to learn about?	There is a strong career pathway that has been developed between the career centers, college, and the fire departments. There is priority to hire many of the career center instructors and firefighters that work in the district so that students have exposure to the same curriculum throughout the pathway, and so that they develop relationships with mentors in the district that can provide them with networking and employment opportunities. In 2016, the advisory committee noted that there was a need for courses to be offered in a Monday through Friday, 40 hour a week class format. As this could not be done on the credit side, a collaboration was developed with the former department of Workforce Development. This allowed current firefighters to complete the requirements for professional development through the non-credit division, and then apply for Prior Learning Assessment to gain the credit. In order to gain credit, the student needs to pass the OSFM exam. We have cooperative partners with Oswego Fire Protection District, Aurora Fire Department, and Montgomery Fire Department. The non-credit courses are offered at Oswego Fire Protection District's fire station.
3.6 Are there dual credit opportunities? If so please list offerings and the associated high schools.	There is a strong career center relationship with Indian Valley Vocational Center, Fox Valley Career Center, and Kishwaukee Educational Consortium. Students can complete FSC105, FSC115, FSC118, FSC120, FSC125, FSC140, FSC150, and FSC215 as dual credit.

3.7 What work-based learning opportunities are available and integrated into the curriculum?	Work based opportunities are embedded in all of our courses and include employee scenario and role playing in leadership and conflict management.
3.8 Is industry accreditation required for this program (e.g. nursing)? If so, identify the accrediting body. Please also list if the college has chosen to voluntarily seek accreditation (e.g. automotive technology, NATEF).	Industry accreditation is not required for this program. However, all of our classes need to be certified by the OFSM office every five years.
3.9 Are industry-recognized credentials offered? If so, please list.	Students can obtain State Certification as a Fire Officer I after they complete the courses, have five years of fire science experience, and are hired by a fire department.
3.10 Is this an apprenticeship program? If so, please elaborate.	This program is not an apprenticeship program.
3.11 If applicable, please list the licensure examination pass rate.	The State of Illinois does not provide results from certification testing.
3.12 What current articulation or cooperative agreements/initiatives are in place for this program?	We have cooperative agreements with Fox Valley Career Center in Maple Park, Illinois, the Indian Valley Vocational Center in Sandwich, IL and Kishwaukee Education Consortium in Malta, Illinois. We also have cooperative agreements with the Oswego Fire Protection District, Montgomery Fire Department, Aurora Fire Department, and Whittaker's Auto Salvage to offer courses on location. The program stores some equipment at Oswego Fire Protection District. In addition, we have an academic transfer articulation with Southern Illinois University.
3.13 Have partnerships been formed since the last review that may increase the quality of the program and its courses? If so, with whom?	We have partnerships with the Fox Valley Career Center and the Indian Valley Vocational Center. The newest collaboration is with Kishwaukee Educational Consortium. We also have a strong partnership with the Oswego Fire Protection District. We use their training facility for several of our classes. They also provide space to house our Fire Engine and all of our fire science equipment.
3.14 What is the faculty to student ratio for courses in this program? Please provide a range and average.	Total End of Term Program Enrollment 111 Courses In Program (Ran FY2017) 8.0 Min Course Average Class Size 4.0 Max Course Average Class Size 12.0 Average of Course Average Class Size 9.6

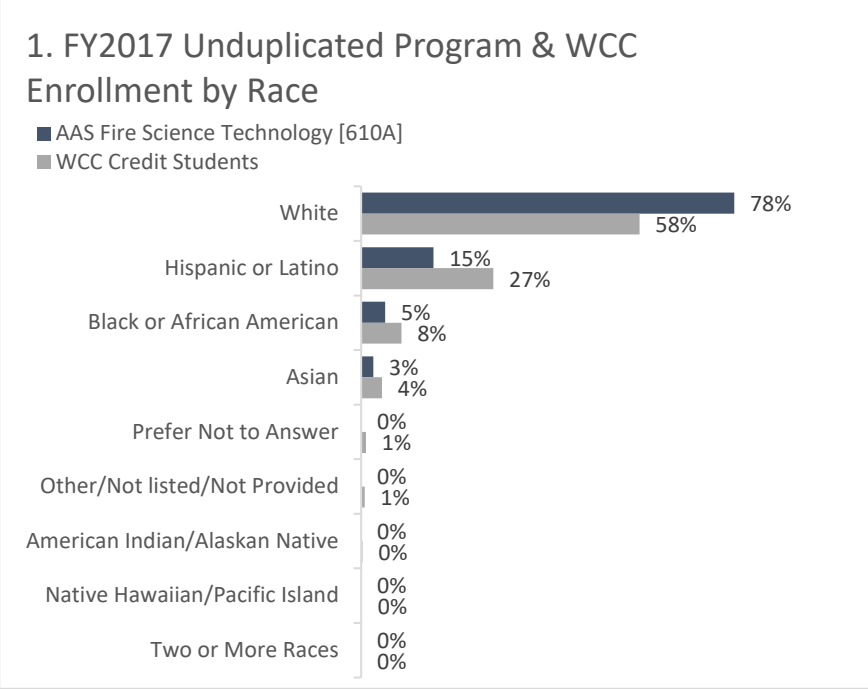
3.15 What professional development or training is offered to adjunct and full time faculty that may increase the quality of this program?	Waubonsee provides face-to-face training sessions, e-learnings, job aids and one-on-one appointments to all employees of the college. Topics include Blackboard training and support, instructional design, classroom management strategies. In addition, a three day orientation is offered for faculty at the beginning of each semester which provides professional development opportunities. Full-time faculty are also provided with professional development funds to attend discipline specific meetings and conferences provided by outside organizations. Several new positions were recently created to focus on faculty development at the college. These include a Dean of Faculty Development, an Assistant Dean for Online Learning and Flexible Delivery and three faculty liaisons to focus on Faculty Development and engagement. Fire Science faculty also participate in VALEES events in order to collaborate with the fire science faculty at the affiliated career centers.
3.16 What is the status of the current technology and equipment used for this program?	We have most of the equipment necessary to complete all required components of the classes. It is inventoried yearly and stored at the Oswego Fire Department Station 3. The fire gear is stored at the Plano Campus Room 215 and is inventoried every semester. A few items such as the fire engine and SCBA harnesses and tanks are older second hand items. These items require some yearly maintenance. There are some items which we would still like to purchase for the program such as a Thermal Imaging Camera, air monitoring devices, a propane fire simulator and additional fire gear. The fire officer classes are didactic instruction and only require classroom equipment.
3.17 What assessment methods are used to ensure student success?	Students currently complete short answer and multiple choice quizzes, midterms and final exams. Students also participate in role playing and scenarios which are observed and documented by instructors in accordance with the industry requirements.
3.18 How satisfied are students with their preparation for employment?	CTE graduates' satisfaction with their preparation for employment was last measured by the ICCB mandated Career and Technical Education Follow-up Survey (ICCB FS submission) in 2016 for 2015 graduates. Since the CTE Survey is no longer mandated or collected by ICCB, Waubonsee is developing a new Alumni Survey which will be administered annually beginning one year post-graduation. The intent is to capture long-range outcomes, including data about satisfaction with Waubonsee's preparation for their employment.
3.19 How is student satisfaction information collected?	WCC uses two institutional level surveys to measure student satisfaction indicators: the Student Satisfaction Inventory (SSI) and the Community College Survey of Student Engagement (CCSSE). In addition, a graduating student survey was piloted in 2017. Spring 2018 the survey will be administered to all students completing petitions to graduate.

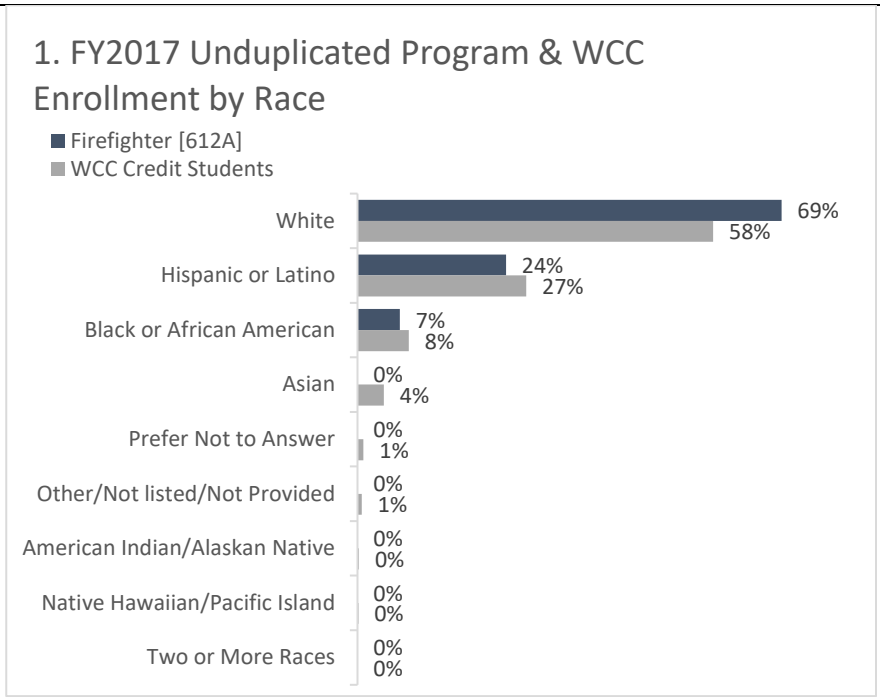
3.20 How are employers engaged in this program? (e.g. curriculum design, review, placement, work-based learning opportunities)	We have a Fire Science advisory council meeting every Spring to which all area fire chief, educators and partners are invited. At that time we review any curriculum changes. We also receive feedback from the fire departments on any needs they have that we may be able to work with them to fulfill. This will be increased to two meetings each year as of 2018-2019.
3.21 How often does the program advisory committee meet?	Annually. As of the 2018-2019 academic year, the meetings will be increased to twice a year.
3.22 How satisfied are employers in the preparation of the program's graduates?	Through informal conversations with employers at our advisory committee we believe that our employers are satisfied with our graduates. Waubonsee continues to work on a formal process to survey employer satisfaction.
3.23 How is employer satisfaction information collected?	We survey employers at our employer fair but this does not provide enough data to be significant.
3.24 Did the review of program quality result in any actions or modifications? Please explain.	The review of the program did not result in any immediate modifications.

DATA ANALYSIS FOR CTE PROGRAM REVIEW

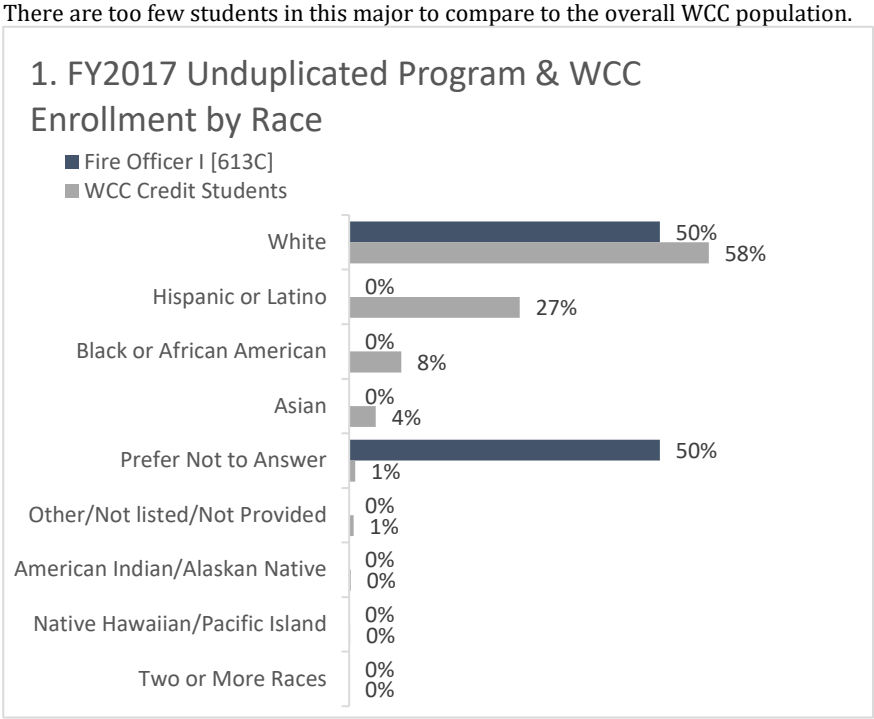
Please complete for each program reviewed. Colleges may report aggregated data from the parent program or report on enrollment and completion data individually for each certificate within the program. Provide the most recent 5 year longitudinal data available.

CTE PROGRAM	Fire Officer I				
CIP CODE	43.0202				
	YEAR 1 (FY13)	*YEAR 2 (FY14)*	*YEAR 3 (FY15)*	*YEAR 4 (FY16)*	*YEAR 5 (FY17)*
NUMBER OF STUDENTS ENROLLED	3	3	2	1	2
NUMBER OF COMPLETERS	1	2	4	2	1
OTHER (PLEASE IDENTIFY)					
How does the data support the program goals? Elaborate.	Waubonsee has not determined program goals in the area of enrollment and completion. Our current goals are based on total credit enrollment. We are currently defining program goals as part of our continuous improvement process. Beginning fall 2018 we will implement program admissions goals.				
What disaggregated data was reviewed?	Data reviewed was retrieved from the Banner Student System. Students who selected the Fire Officer I certificate as a program of study were included in this report.				

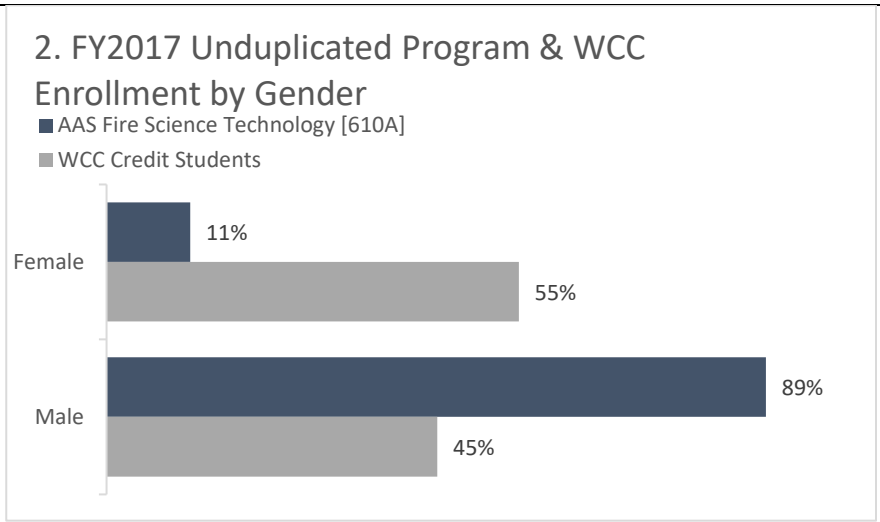
Were there gaps in the data? Please explain.	Students are provided the opportunity to select their program of study on the New Student Information Form (NSIF) upon entry at Waubonsee. Students can change their program at any time online. There may have been students not included in the analysis because they did not select Fire Officer I as their program of study.
What is the college doing to overcome any identifiable gaps?	Waubonsee is reviewing our intake process and analyzing how major codes are defined and updated when students change their program of study from their initial selection on the New Student Information Form.
Are the students served in this program representative of the total student population? Please explain.	AAS Fire Science Technology [610A] This program's enrollment disproportionately has more White students and fewer Hispanic or Latino students, though the largest representation from White students and the second largest population from Hispanic or Latino students.  Firefighter [612A]



Fire Officer I [613C]
There are too few students in this major to compare to the overall WCC population.



AAS Fire Science Technology [610A]
The program's enrollment is overwhelmingly male compared to the college's population.



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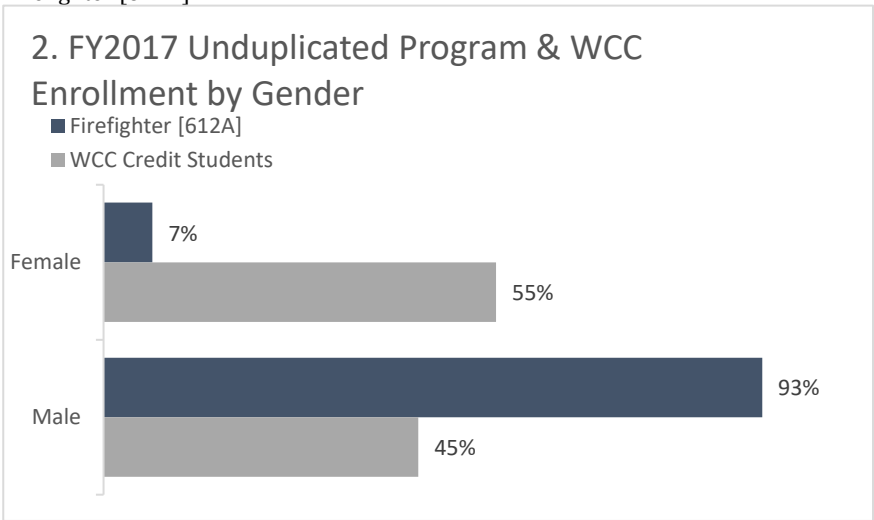

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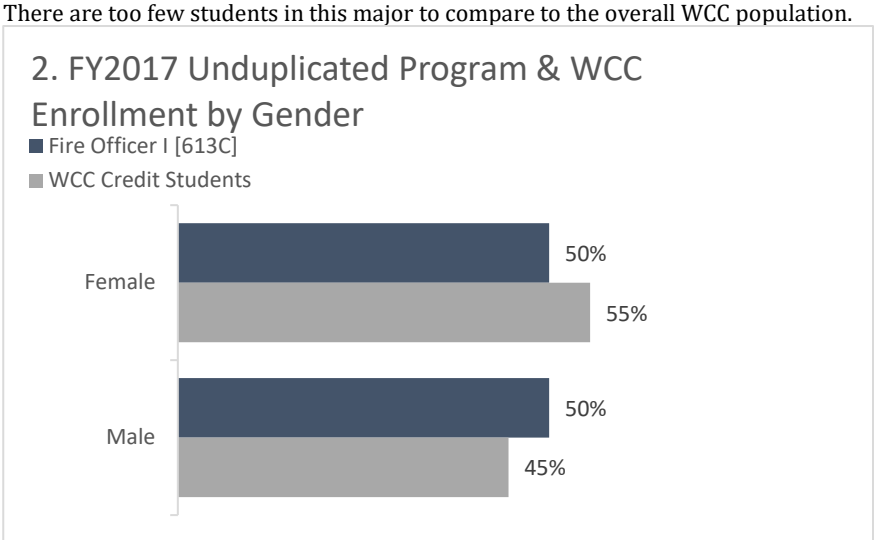

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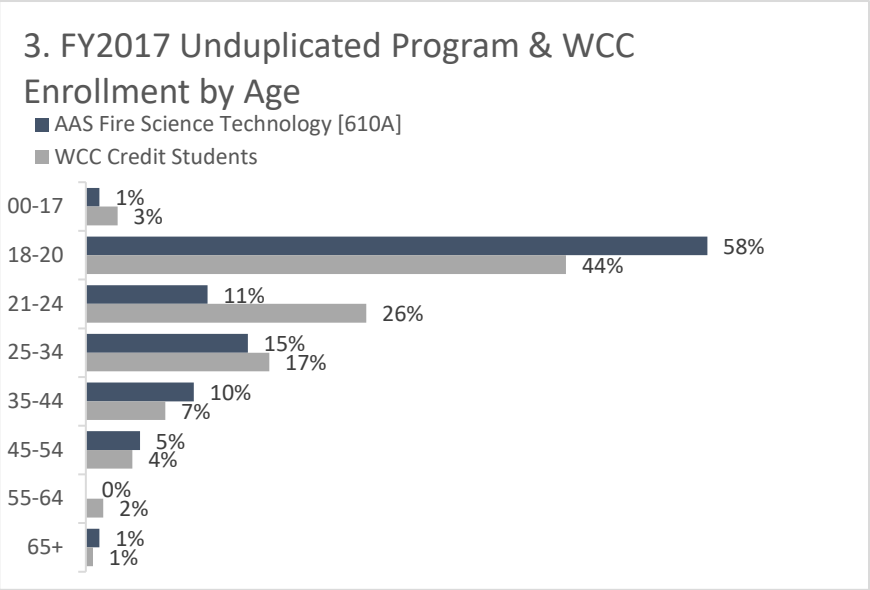

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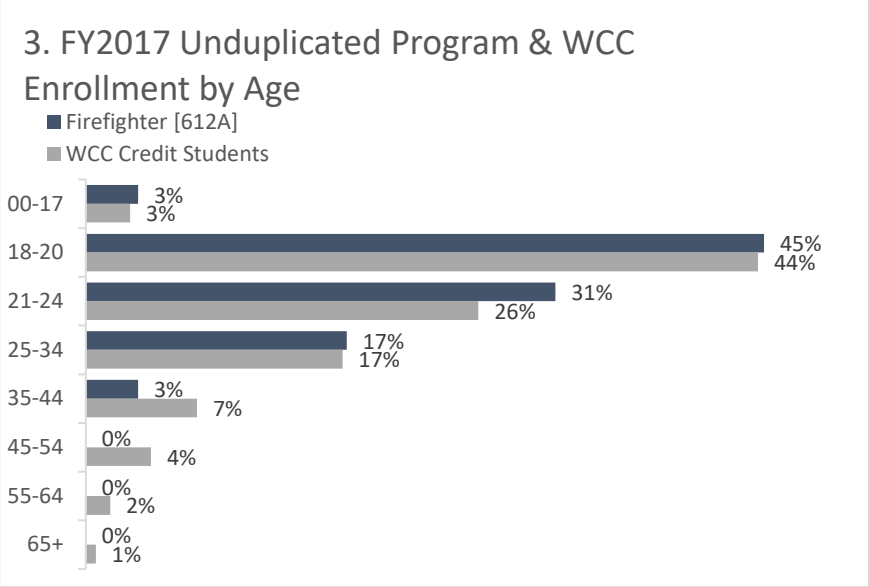

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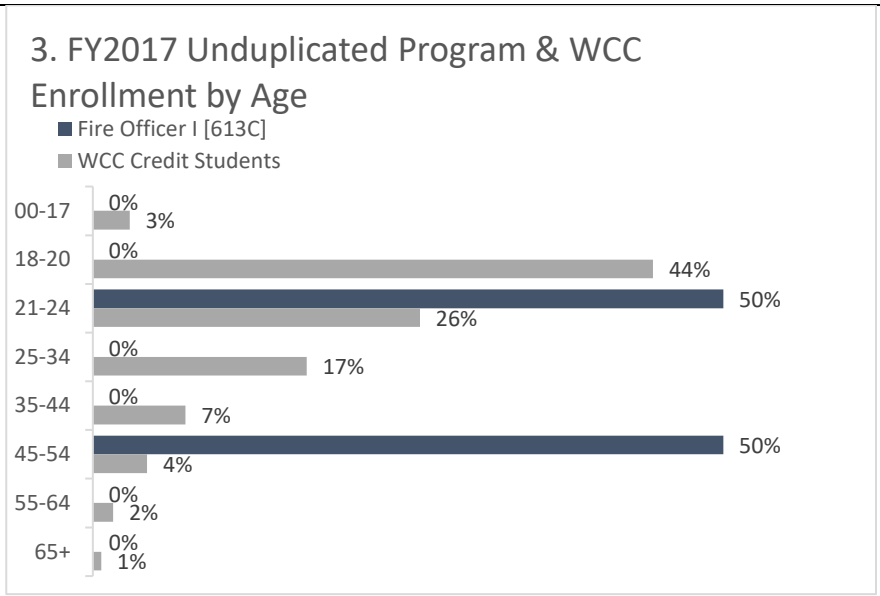

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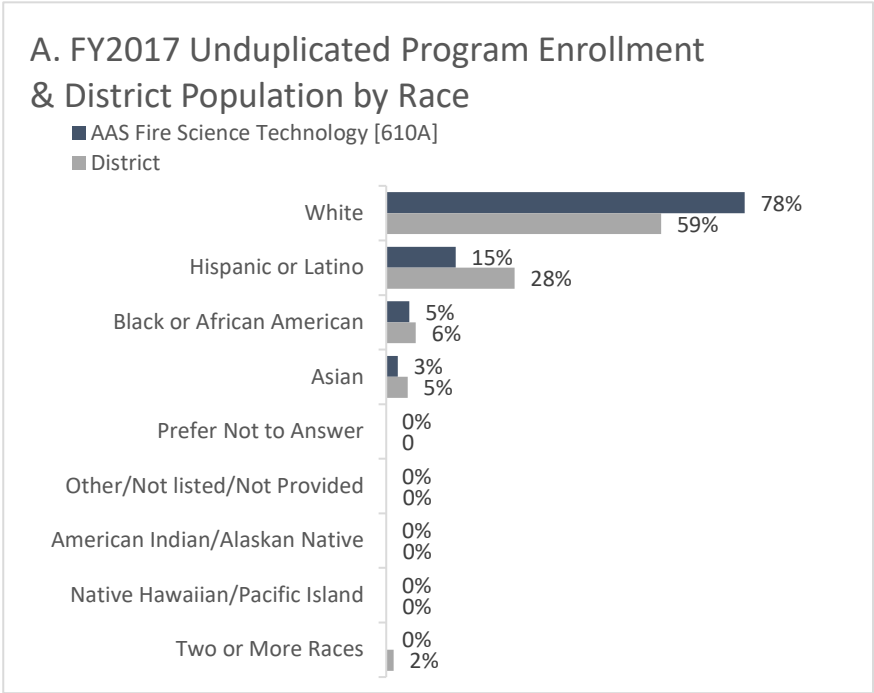

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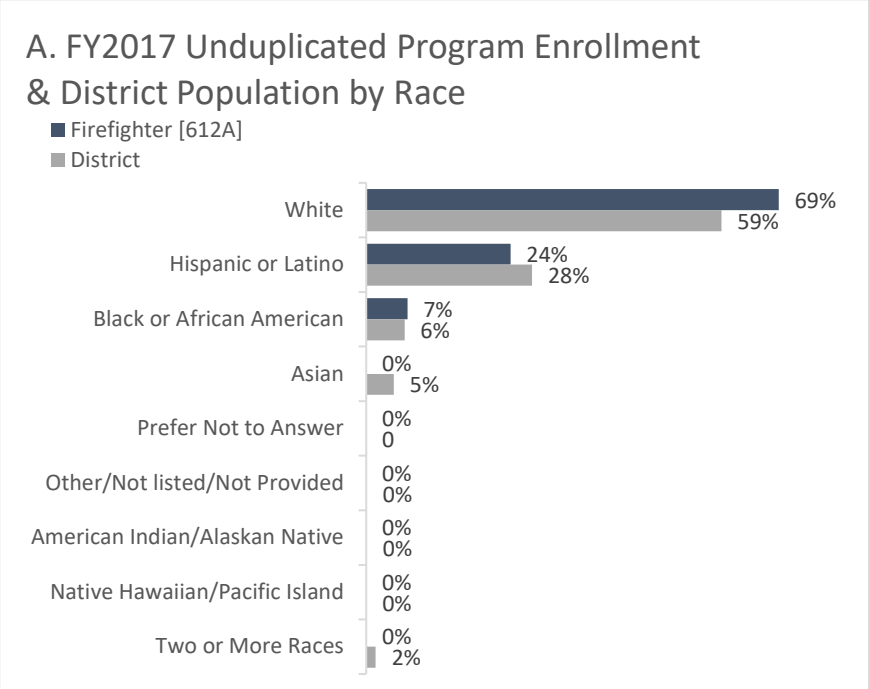

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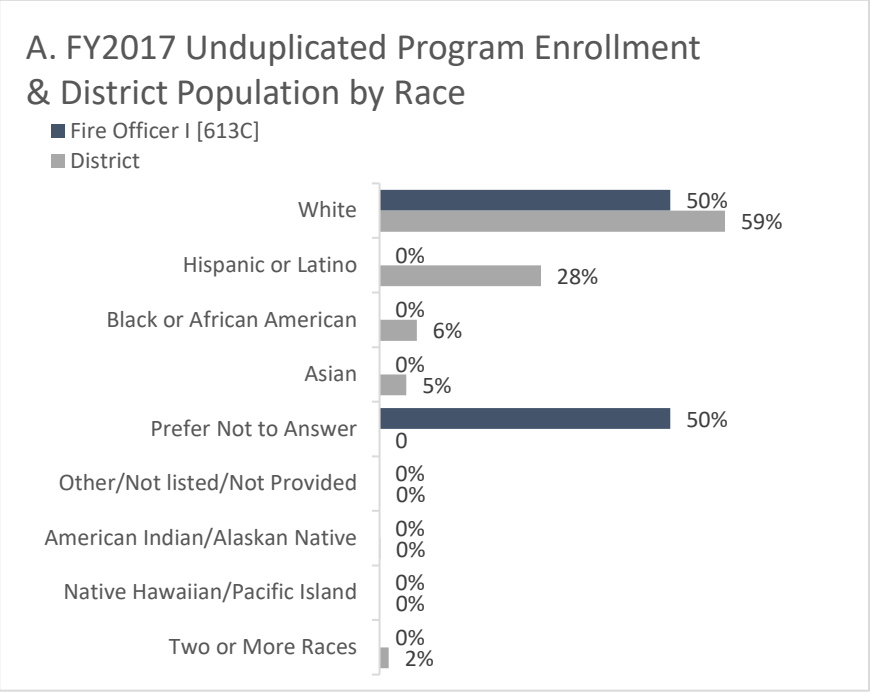

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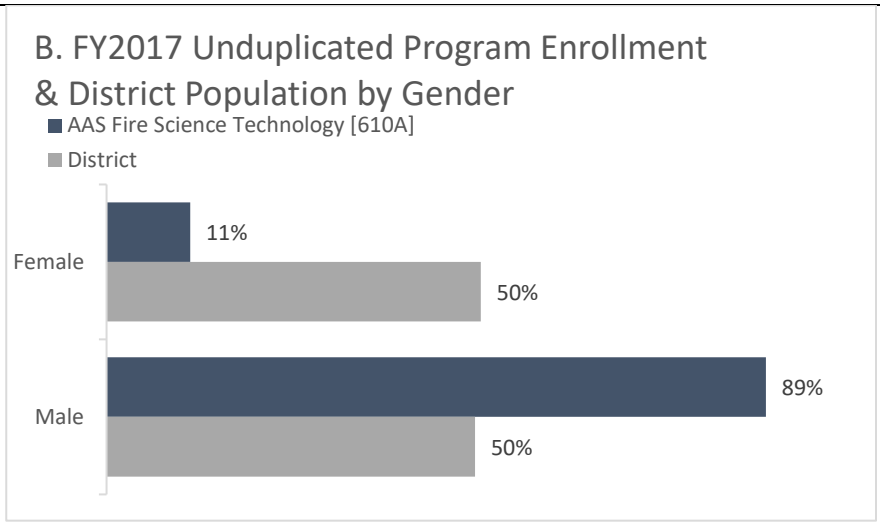

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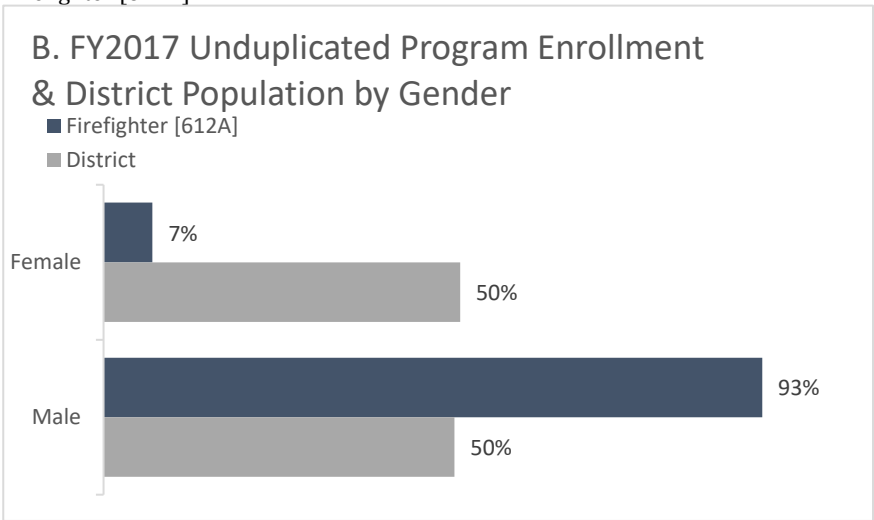

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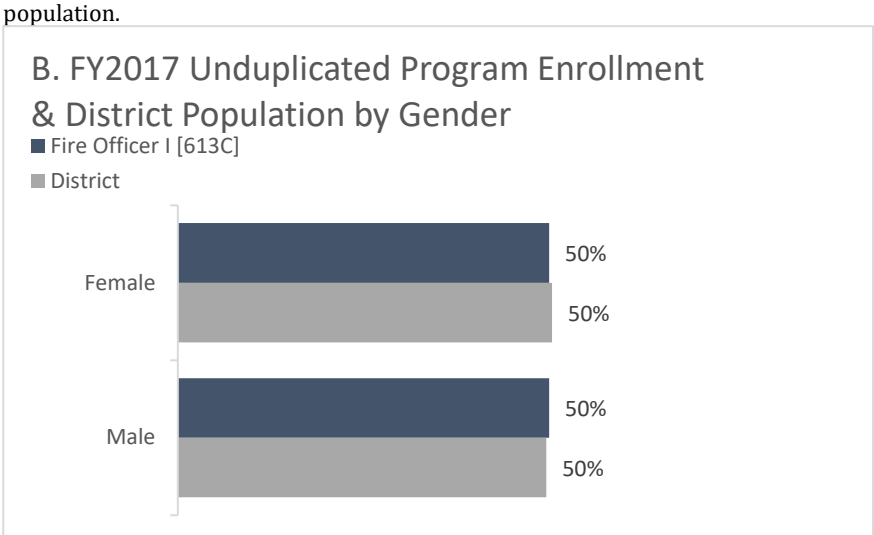

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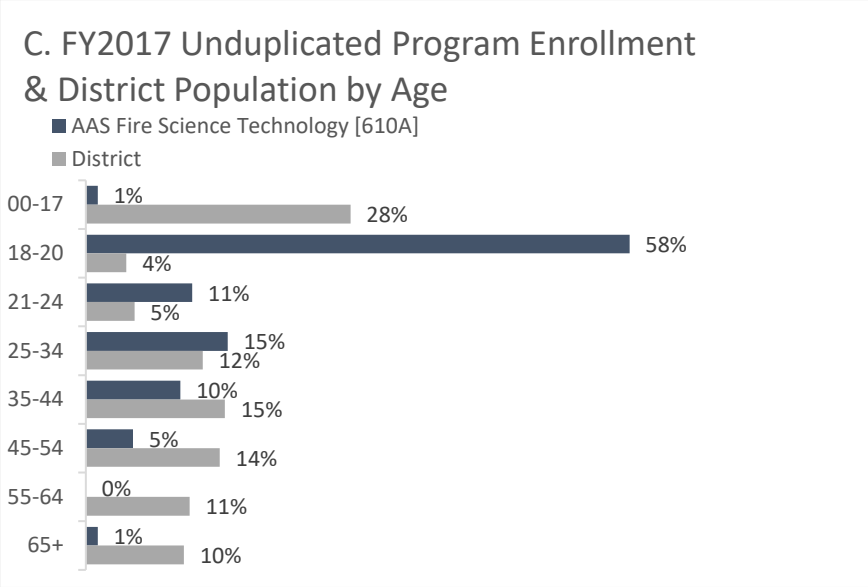

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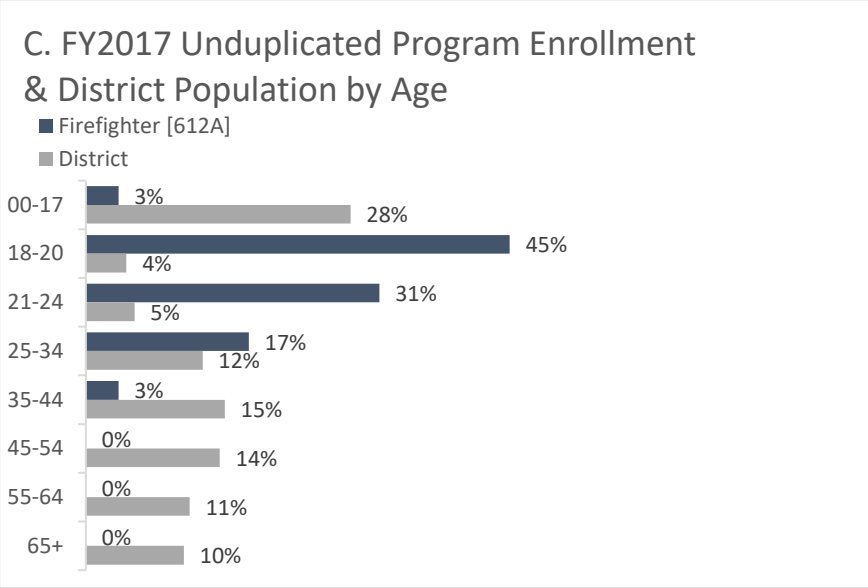

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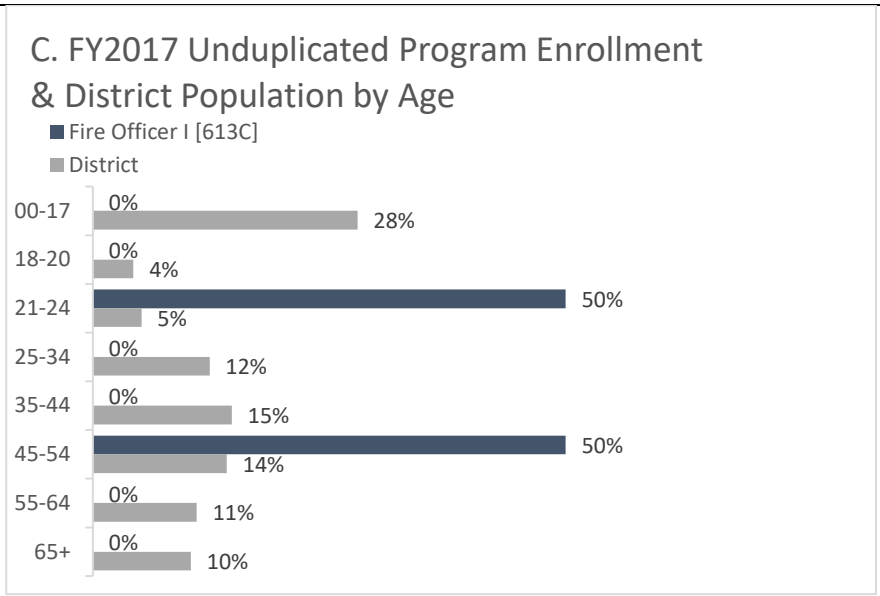


REVIEW RESULTS	
Action	☒ Continued with Minor Improvements ☐ Significantly Modified ☐ Placed on Inactive Status ☐Discontinued/Eliminated ☐ Other (please specify)
Summary Rationale Please provide a brief rationale for the chosen action.	This program provides coursework for student promotion and degree completion. This coursework is required within the local area for promotion, and there are stable employment trends. This program needs to increase support to returning firefighters that are using Prior Learning Assessment to complete this certificate to access those promotional opportunities. These students can use these courses to complete the electives in their degree.
Intended Action Steps What are the action steps resulting from this review? Please detail a timeline and/or dates for each step.	1. Analyze assessment data for program outcome to describe the laws related to fire science by December 1, 2018. 2. Develop a mentoring program by May 1, 2019. 3. Create new courses to align with new certification standards by May 1, 2019. 4. Increase support to non-traditional students that are returning to complete their certificate through the use of PLA by providing follow up and counseling.

Career & Technical Education

College Name:	Waubonsee Community College
Fiscal Year in Review:	2017-2018

Program Identification Information

Program Title	*Degree or Cert*	*Total Credit Hours*	*6-Digit CIP Code*	*List All certificate programs that are stackable within the parent degree*
Fire Science	**Degree**	**60**	**43.0203**	**Fire Fighter Certificate**

Address all fields in the template. If there are certificates and/or other stackable credentials within the program, please be sure to specify and sufficiently address all questions regarding each stackable credential.

Program Outcomes What are the overarching objectives/goals of the program?	**1.** Demonstrate firefighting competencies **2.** Discuss ethical situations applicable to the fire science workplace. **3.** Recognize the National Fire Protection Association (NFPA) standards as they apply to fire science. **4.** Explain the Occupational Safety and Health Administration (OSHA) standards as they apply to fire science. **5.** Describe fire service technology and the impact advances will have on the fire service **6.** Identify construction systems and components that impact fire fighter safety.
To what extent are these outcomes being achieved?	We are beginning to gather assessment data on our program this spring 2018. Based on other types of assessments: certification pass rates and meeting the Office of the State Fire marshal objectives, our students are meeting our program outcomes.
Past Program Review Action What action was reported last time the program was reviewed?	Continued with Minor Improvements

CTE Program Review Analysis

Complete the following fields and provide concise information where applicable. Please do not insert full data sets but summarize the data to completely answer the questions. Concise tables displaying this data may be attached. The review will be sent back if any of the below fields are left empty or inadequate information is provided.

List all pre-requisites for this program (courses, placement scores, etc.).

Course	**Prerequisite**
FSC115 Basic Operations Firefighter Module B	FSC105 Basic Operations Firefighter Module A
FSC118 Basic Operations Firefighter Module C	FSC115 Basic Operations Firefighter Module B

Please list or attach all required courses (including titles) for completion of this program including institution required courses (e.g. student success, first year, general education requirements, etc.).	**General Education Requirements**.....15 COM 100 or 121 Communications.....3 ENG 101 or 152 English .....3 ENG 102 or 153 English .....3 Mathematics elective .....3 Psychology or Sociology elective, PSY 100 recommended.....3 **Fire Science Technology Major** Program Requirements.....27 FSC 105 Basic Operation Firefighter Module A.....4 FSC 115 Basic Operation Firefighter Module B.....4 FSC 118 Basic Operation Firefighter Module C.....4 FSC 120 Hazardous Materials Operations.....3 FSC 125 Advanced Technician Firefighter.....4 FSC 150 Vehicle and Machinery Operations.....3 FSC 140 Fire Apparatus Engineer.....4 FSC 215 Technical Rescue and Vehicle Operations.....1 Electives.....18 Select an elective from the courses listed. **EMT 120 Emergency** Medical Technician-Basic.....9 FSC 160 Tactics and Strategy I.....3 FSC 170 Fire Science Instructor I.....3 FSC 220 Fire Inspection and Prevention.....3 FSC 231 Fire Science Administration I.....3 FSC 232 Fire Science Administration II.....3 FSC 233 Fire Science Administration III.....3 FSC 234 Fire Science Administration IV.....3 FSC 260 Tactics and Strategy II.....3 FSC 270 Fire Science Instructor II.....3 ITS 297 Internship.....1 ITS 298 Internship.....2 ITS 299 Internship.....3 **PROGRAM TOTAL.....60**
Provide a rational for content/credit hours beyond 30 hours for a certificate or 60 hours for a degree.	Not Applicable.
INDICATOR 1: NEED	***RESPONSE***
1.1 How strong is the occupational demand for the program?	The Firefighter program enrollment has continued to remain stable for the past five years with an average enrollment of 30 students. Trends regionally according to economic data indicate an increase in jobs by 171 positions or 1.3% between 2018 and 2023. Although the percentage of job growth isn't trending as strong, the number of openings regionally and in our state are strong with 171 and 233 positions respectively. Data suggests that there will be 79 additional job openings in the counties in Waubonsee's area at this same time. In addition, the median hourly earnings is $28.66 per hour is well above the living wage for our county of $12.53 per hour.

1.2 How has demand changed in the past five years and what is the outlook for the next five years?	According to economic modeling data, there was a 2.7% increase in jobs between the years of 2013 and 2018. The data indicates an addition of 79 additional positions in our counties by 2023.
1.3 What is the district and/or regional need?	Economic Modeling data indicates an addition of 79 additional positions in our district by 2023.
1.4 How are students recruited for this program?	In addition to traditional college recruitment programs, students are also recruited through the Valley Education for Employment System (VALEES), a program that WCC collaborates with which awards college credit for learning experiences at the high school level for instruction (dual enrollment programs). In addition, the college hosts several open houses to showcase our many programs and services.
1.5 Where are students recruited from?	Students are recruited from area high schools and our cooperative agreements with Fox Valley Career Center in Maple Park, Illinois, the Indian Valley Vocational Center in Sandwich, IL and Kishwaukee Education Consortium in Malta, Illinois.
1.6 Did the review of program need result in actions or modifications? Please explain.	The review of the program did not result in any immediate modifications.
INDICATOR 2: COST EFFECTIVENESS	***RESPONSE***
2.1 What are the costs associated with this program?	The direct costs associated with the program include: • Faculty salary and benefits (full-time and part-time) • Instructional supplies • Technology, software and services • Publications and dues • Full-time faculty professional development
2.2 How do costs compare to other programs on campus?	The costs associated with this program is $1,111.77 per load hour which is 55% less than the institutional average of $2002.00 per load hour.
2.3 How is the college paying for this program and its costs (e.g. grants, etc.)?	The college pays for this program and its costs through tuition and fees.
2.4 If most of the costs are offset by grant funding, is there a sustainability plan in place in the absence of an outside funding source? Please explain.	Not Applicable as the program is supported by institutional funds.
2.5 Did the review of program cost result in any actions or modifications? Please explain.	The review of Fire Science did not result in any actions or modifications.
INDICATOR 3: QUALITY	***RESPONSE***

3.1 What are the program's strengths?	Our Firefighter certificate is set up in such a way that it can be completed in one semester. All five required classes are offered every semester without conflicting with each other. These classes meet all requirements of the Office of the State Fire Marshal (OSFM) for the introductory level firefighter certifications. Our AAS is also comprised of classes approved by OSFM. We have taken care to ensure that classes are scheduled in such a way to avoid conflicts and enable students to complete the degree in a timely manner. All classes are taught by experienced firefighters or fire officers who are still in the career field. Our instructors are not only able to provide relevant education, but provide networking and knowledge of careers in the fire service as well.
3.2 What are the identified or potential weaknesses of the program?	Although we are continually working to increase enrollment in the program, we do still occasionally have low numbers in the intermediate and advanced level classes. This means these classes are cancelled that then increases time to completion. All of our classes are offered only nights and weekends. While we have found that this schedule works best for the majority of our students, there are some students who find this schedule difficult, in particular our student athletes.
3.3 What are the delivery methods of this program? (e.g. traditional format/online/hybrid/team-teaching etc.)?	Currently, all our courses are offered in a traditional face to face format. All courses involve team teaching.
3.4 How does this program fit into a career pathway?	Career Cluster: Law, Public Safety, Corrections and Security Career Pathway: Emergency and Fire Management Services CIP Program Title: Fire Science/Firefighting
3.5 What innovations have been implemented or brought to this program that other colleges would want to learn about?	We are one of only a few community colleges in Illinois which have adapted our program to allow non-rostered students (those not currently employed on a fire department) to take all of our classes. We have been able to accomplish this through our very successful partnership with the Oswego Fire Protection District. We were also able to secure funds through grants to purchase needed equipment such as firefighting gear, Self-Contained Breathing Apparatus (SCBA) and a fire engine. This helped to allow those non-rostered students to participate in the class. It also removed a significant financial burden, as the students previously had to rent fire gear at a cost each semester. We also have strong partnerships with our area high school career centers. We are able to offer articulated and dual credit to a large number of high school students through this program. These students then enter Waubonsee with a significant number of credits towards their degree already completed. This reduces their time to completion for their AAS.
3.6 Are there dual credit opportunities? If so please list offerings and the associated high schools.	We have very successful dual credit opportunities for our students. We have three career centers: Indian Valley Vocational Center, Fox Valley Career Center and Kishwaukee Education Consortium (out of district). Students can complete up to 27 credit hours at the centers over the span of their junior and senior year of high school and then complete a WCC AAS program in 1 to 1.5 years

3.7 What work-based learning opportunities are available and integrated into the curriculum?	Students participate in numerous scenarios designed to mimic emergency scenes. We have most of the necessary fire equipment, apparatus and facilitates to give a realistic experience. Students are also required to perform equipment checks and inventories as they would in the work setting. Six of the eight program requirement classes are held in fire departments in the district, which allows students to interact with department staff and learn the culture of the fire industry.
3.8 Is industry accreditation required for this program (e.g. nursing)? If so, identify the accrediting body. Please also list if the college has chosen to voluntarily seek accreditation (e.g. automotive technology, NATEF).	Industry accreditation is not required for this program. However, all of our classes need to be certified by the Illinois Office of State Fire Marshal (OFSM) every five years.
3.9 Are industry-recognized credentials offered? If so, please list.	All of the Fire Science courses are approved by the Illinois Office of the State Fire Marshal (OSFM). After successfully completing our courses and being rostered on a fire department, students are eligible for state certification testing. Waubonsee also provides state certification testing through the Assessment and Learning Center through an agreement with OSFM.
3.10 Is this an apprenticeship program? If so, please elaborate.	This program is not an apprenticeship program.
3.11 If applicable, please list the licensure examination pass rate.	N/A
3.12 What current articulation or cooperative agreements/initiatives are in place for this program?	We have cooperative agreements with Fox Valley Career Center in Maple Park, Illinois, the Indian Valley Vocational Center in Sandwich, IL and Kishwaukee Education Consortium in Malta, Illinois. We also have cooperative agreements with the Oswego Fire Protection District, Montgomery Fire Department, Aurora Fire Department, and Whittaker's Auto Salvage to offer courses on location. The program stores some equipment at Oswego Fire Protection District. In addition, we have an academic transfer articulation with Southern Illinois University.
3.13 Have partnerships been formed since the last review that may increase the quality of the program and its courses? If so, with whom?	We have partnerships with the Fox Valley Career Center and the Indian Valley Vocational Center. The newest collaboration is with Kishwaukee Educational Consortium. We also have a strong partnership with the Oswego Fire Protection District. We use their training facility for several of our classes. They also provide space to house our Fire Engine and all of our fire science equipment.
3.14 What is the faculty to student ratio for courses in this program? Please provide a range and average.	Total End of Term Program Enrollment 98.0 Courses In Program (Ran FY2017) 6.0 Min Course Average Class Size 8.0 Max Course Average Class Size 12.0 Average of Course Average Class Size 10.7

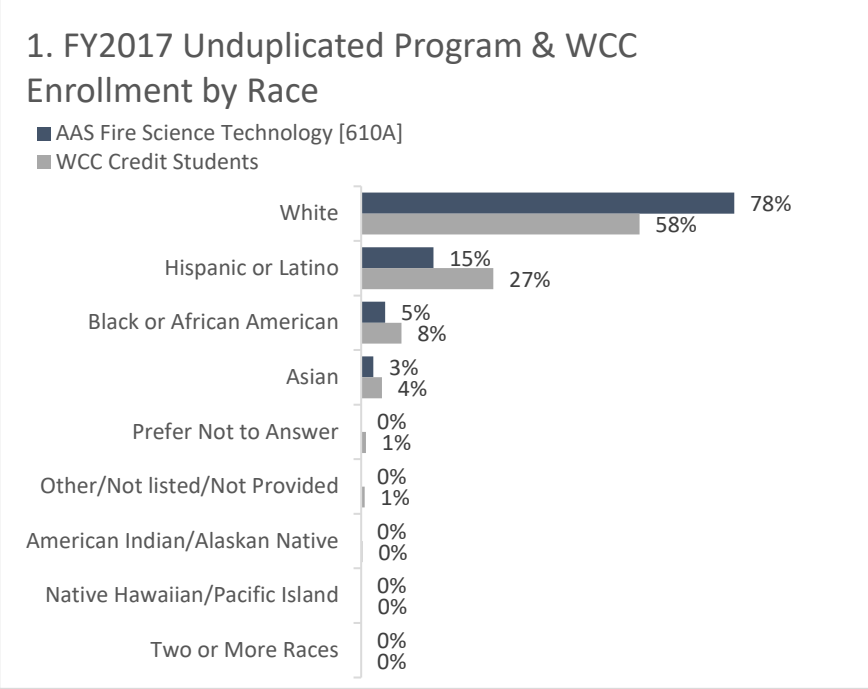
3.15 What professional development or training is offered to adjunct and full time faculty that may increase the quality of this program?	Waubonsee provides face-to-face training sessions, e-learnings, job aids and one-on-one appointments to all employees of the college. Topics include Blackboard training and support, instructional design, classroom management strategies. In addition, a three day orientation is offered for faculty at the beginning of each semester which provides professional development opportunities. Full-time faculty are also provided with professional development funds to attend discipline specific meetings and conferences provided by outside organizations. Several new positions were recently created to focus on faculty development at the college. These include a Dean of Faculty Development, an Assistant Dean for Online Learning and Flexible Delivery and three faculty liaisons to focus on Faculty Development and engagement. Fire Science faculty also participate in VALEES events in order to collaborate with the fire science faculty at the affiliated career centers.
3.16 What is the status of the current technology and equipment used for this program?	We have most of the equipment necessary to complete all required components of the classes. It is inventoried yearly and stored at the Oswego Fire Department Station 3. The fire gear is stored at the Plano Campus Room 215 and is inventoried every semester. A few items such as the fire engine and SCBA harnesses and tanks are older second hand items. These items require some yearly maintenance. There are some items which we would still like to purchase for the program such as a Thermal Imaging Camera, air monitoring devices, a propane fire simulator and additional fire gear.
3.17 What assessment methods are used to ensure student success?	Students currently complete short answer and multiple choice quizzes, midterms and final exams. Students also participate in hands on exercises which are observed and documented by instructors in accordance with the industry requirements.
3.18 How satisfied are students with their preparation for employment?	CTE graduates' satisfaction with their preparation for employment was last measured by the ICCB mandated Career and Technical Education Follow-up Survey (ICCB FS submission) in 2016 for 2015 graduates. Since the CTE Survey is no longer mandated or collected by ICCB, Waubonsee is developing a new Alumni Survey which will be administered annually beginning one year post-graduation. The intent is to capture long-range outcomes, including data about satisfaction with Waubonsee's preparation for their employment.
3.19 How is student satisfaction information collected?	WCC uses two institutional level surveys to measure student satisfaction indicators: the Student Satisfaction Inventory (SSI) and the Community College Survey of Student Engagement (CCSSE). In addition, a graduating student survey was piloted in 2017. Spring 2018 the survey will be administered to all students completing petitions to graduate.

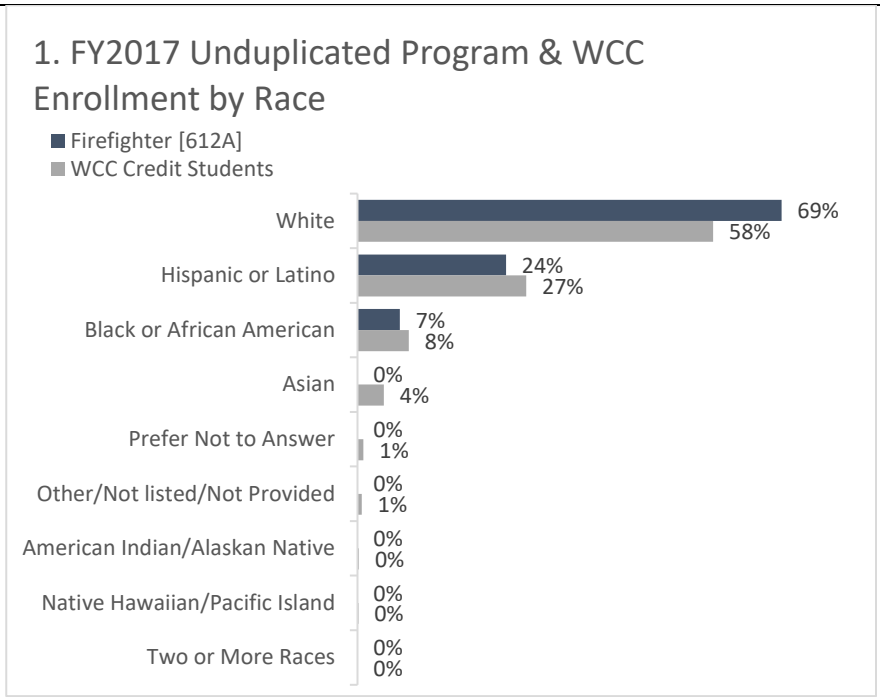
3.20 How are employers engaged in this program? (e.g. curriculum design, review, placement, work-based learning opportunities)	We have a Fire Science advisory council meeting every Spring to which all area fire chief, educators and partners are invited. At that time we review any curriculum changes. We also receive feedback from the fire departments on any needs they have that we may be able to work with them to fulfill. This will be increased to two meetings each year as of 2018-2019.
3.21 How often does the program advisory committee meet?	Annually. As of the 2018-2019 academic year, the meetings will be increased to twice a year.
3.22 How satisfied are employers in the preparation of the program's graduates?	Through informal conversations with employers at our advisory committee we believe that our employers are satisfied with our graduates. Waubonsee continues to work on a formal process to survey employer satisfaction.
3.23 How is employer satisfaction information collected?	We survey employers at our employer fair but this does not provide enough data to be significant.
3.24 Did the review of program quality result in any actions or modifications? Please explain.	The review of the program did not result in any immediate modifications.

DATA ANALYSIS FOR CTE PROGRAM REVIEW

Please complete for each program reviewed. Colleges may report aggregated data from the parent program or report on enrollment and completion data individually for each certificate within the program. Provide the most recent 5 year longitudinal data available.

CTE PROGRAM	Fire Science AAS				
CIP CODE	43.0203				
	YEAR 1 (FY13)	*YEAR 2 (FY14)*	*YEAR 3 (FY15)*	*YEAR 4 (FY16)*	*YEAR 5 (FY17)*
NUMBER OF STUDENTS ENROLLED	AAS 112 Cert 3	AAS 93 Cert 3	AAS 79 Cert 2	AAS 90 Cert 1	AAS 80 Cert 2
NUMBER OF COMPLETERS	AAS 20 Cert 1	AAS 8 CERT 2	AAS 14 Cert 4	AAS 17 Cert 2	AAS 16 Cert 1
OTHER (PLEASE IDENTIFY)					
How does the data support the program goals? Elaborate.	Waubonsee has not determined program goals in the area of enrollment and completion. Our current goals are based on total credit enrollment. We are currently defining program goals as part of our continuous improvement process. Beginning fall 2018 we will implement program admissions goals.				
What disaggregated data was reviewed?	Data reviewed was retrieved from the Banner Student System. Students who selected Fire Science AAS or Certificate(s) as a program of study were included in this report.				

Were there gaps in the data? Please explain.	Students are provided the opportunity to select their program of study on the New Student Information Form (NSIF) upon entry at Waubonsee. Students can change their program at any time online. There may have been students not included in the analysis because they did not select Fire Science as their program of study.
What is the college doing to overcome any identifiable gaps?	Waubonsee is reviewing our intake process and analyzing how major codes are defined and updated when students change their program of study from their initial selection on the New Student Information Form.
Are the students served in this program representative of the total student population? Please explain.	AAS Fire Science Technology [610A] This program's enrollment disproportionately has more White students and fewer Hispanic or Latino students, though the largest representation from White students and the second largest population from Hispanic or Latino students.  Firefighter [612A]



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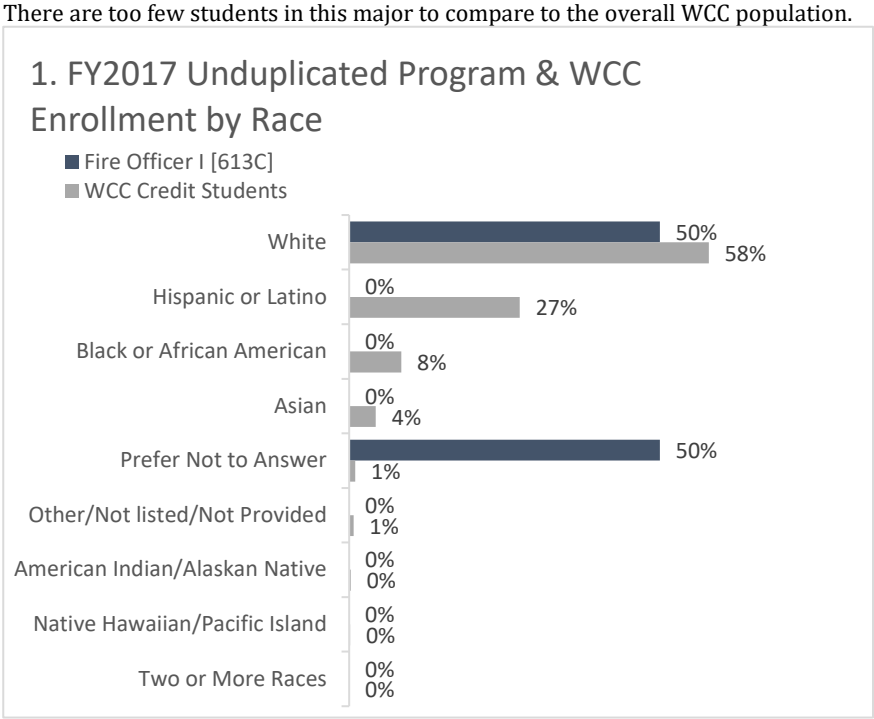

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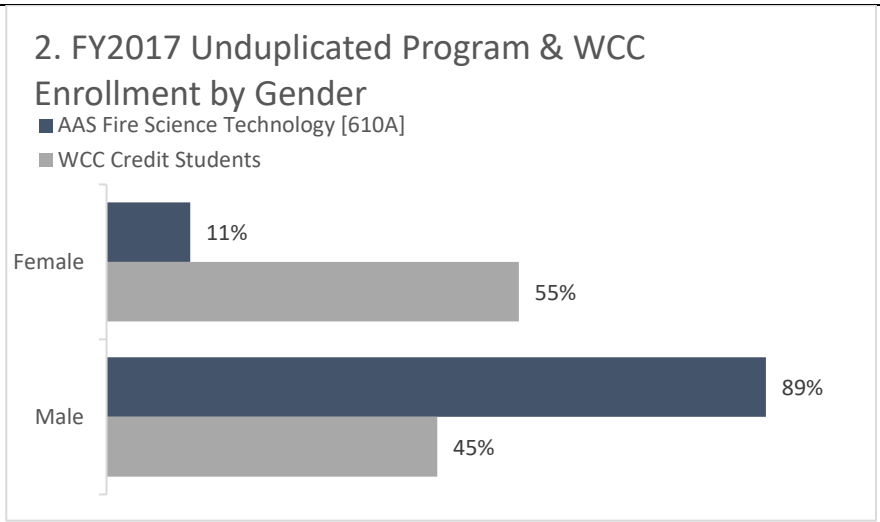

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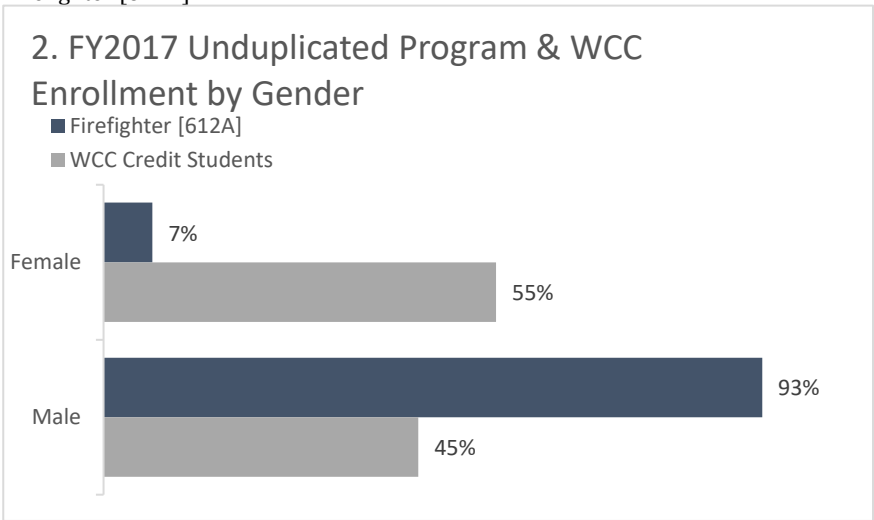

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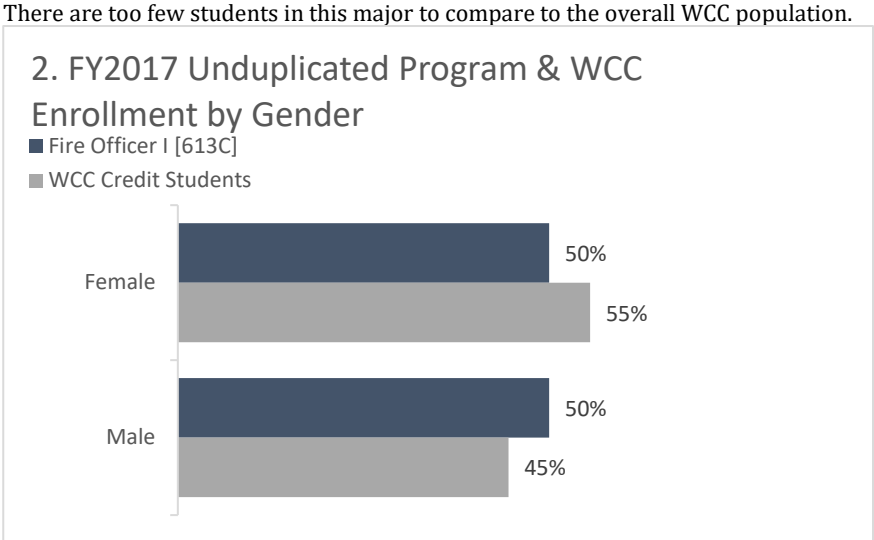

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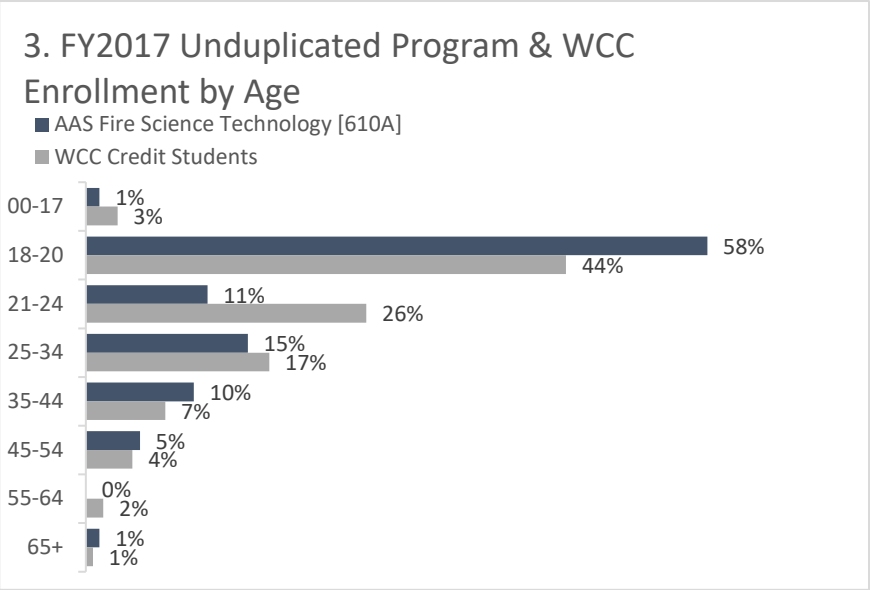

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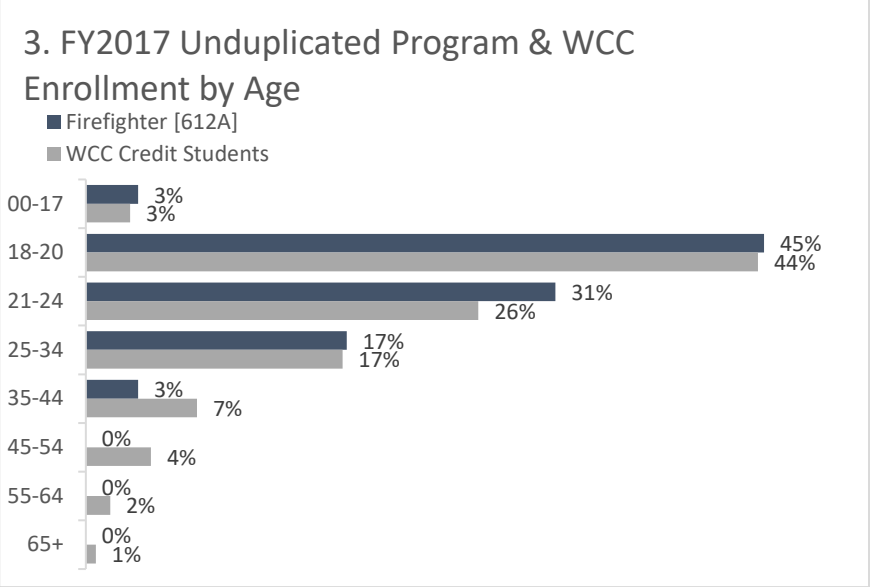

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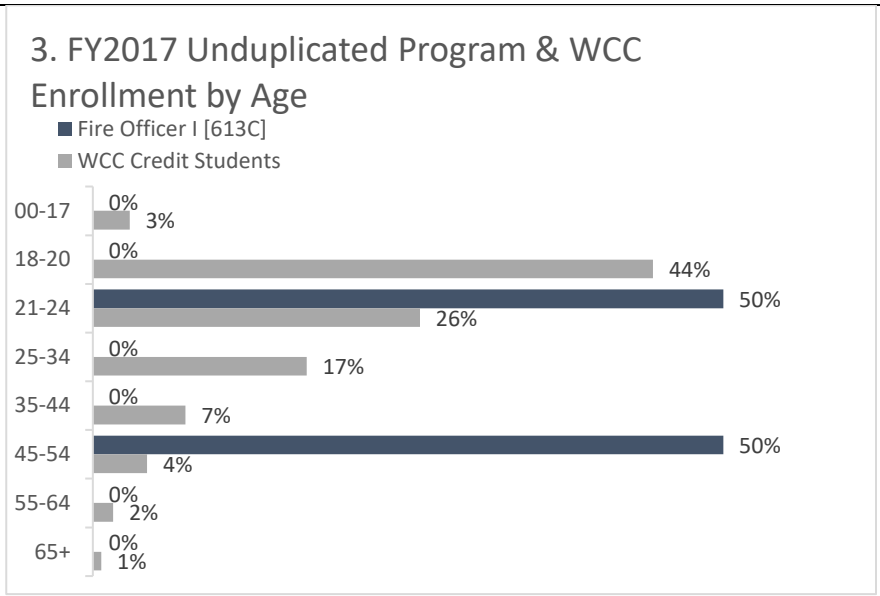
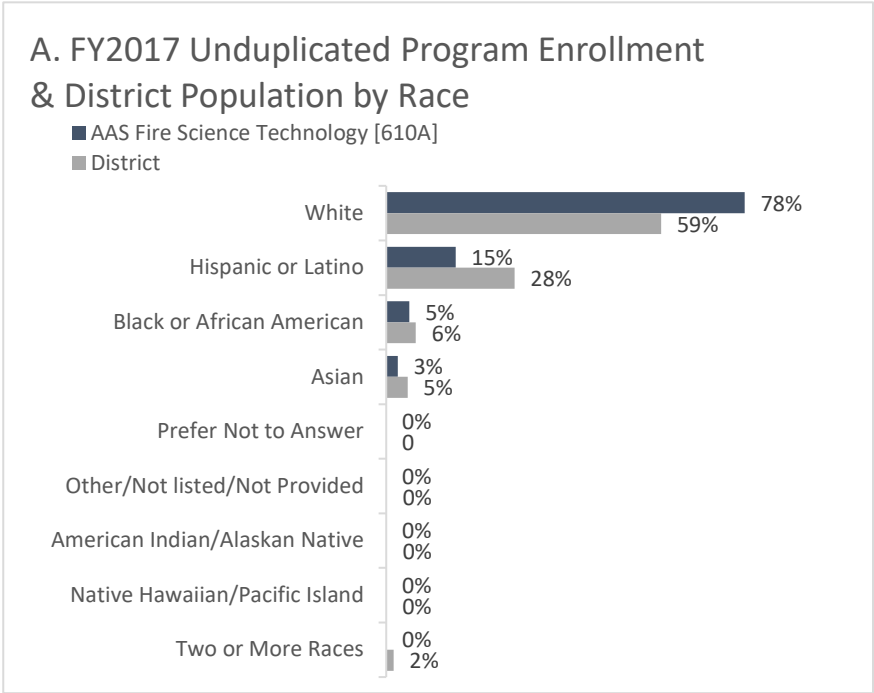
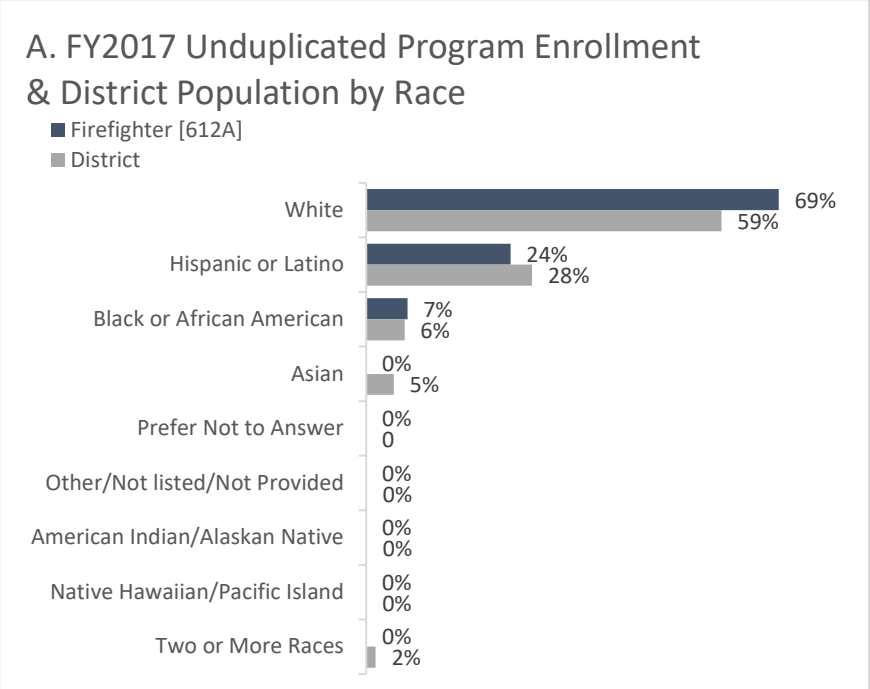


Are the students served in this program representative of the district population? Please explain.

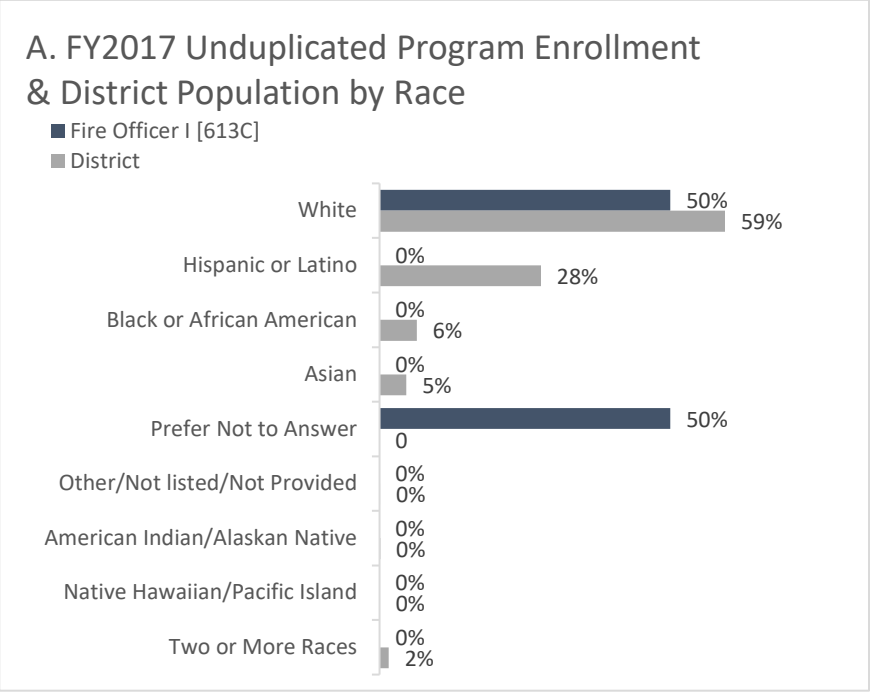
AAS Fire Science Technology [610A]
This program's enrollment disproportionately has more White students and fewer Hispanic or Latino students, though the largest representation from White students and the second largest population from Hispanic or Latino students.



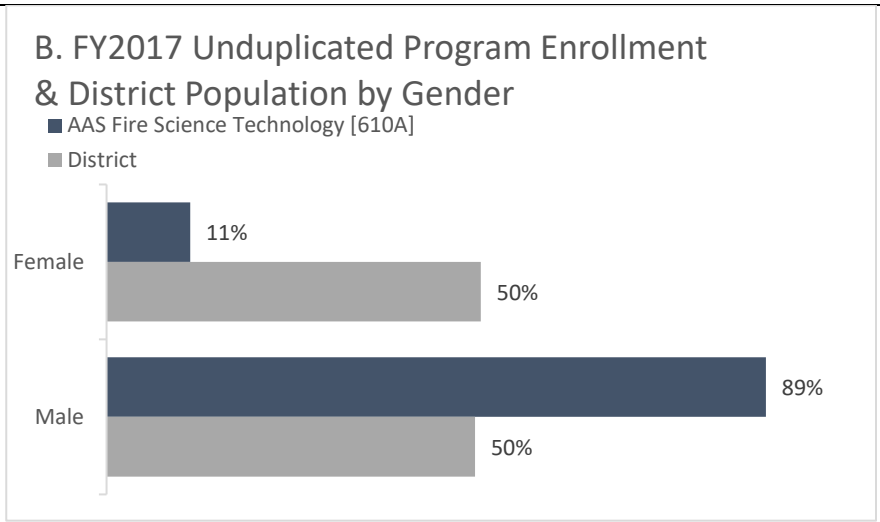
Firefighter [612A]



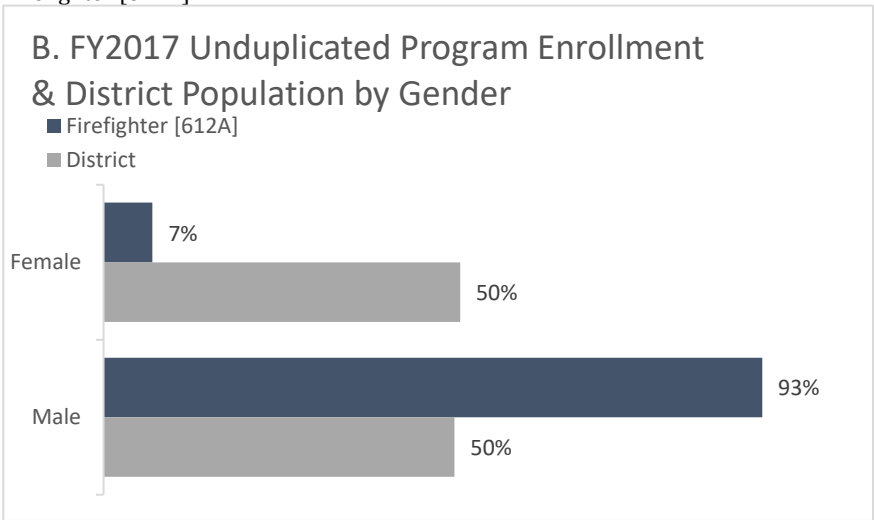
Fire Officer I [613C]
There are too few students in this major to compare to the overall district population.



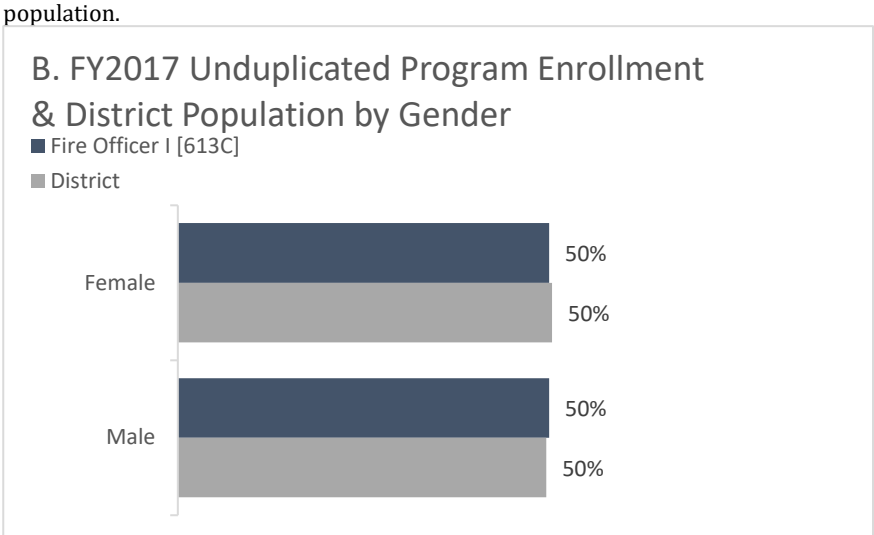
AAS Fire Science Technology [610A]
This program's enrollment is overwhelmingly male compared to This district's population.



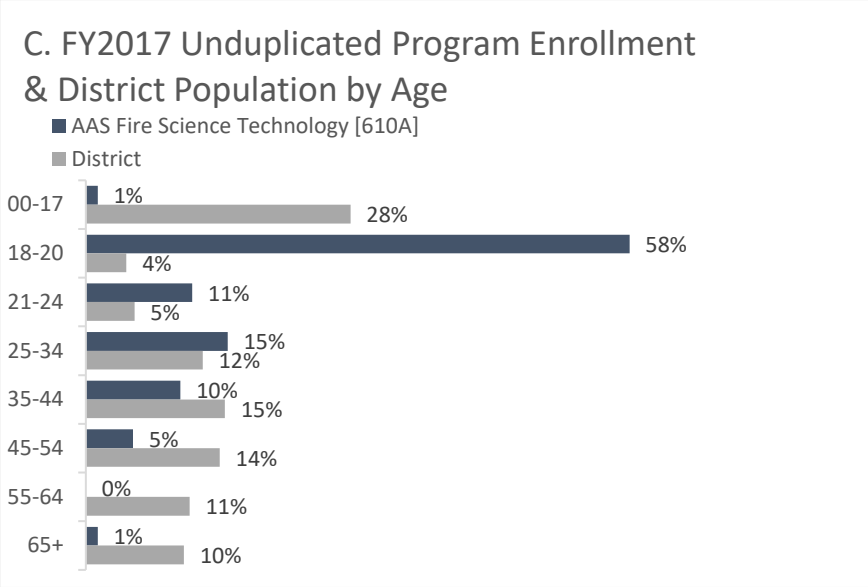
Firefighter [612A]



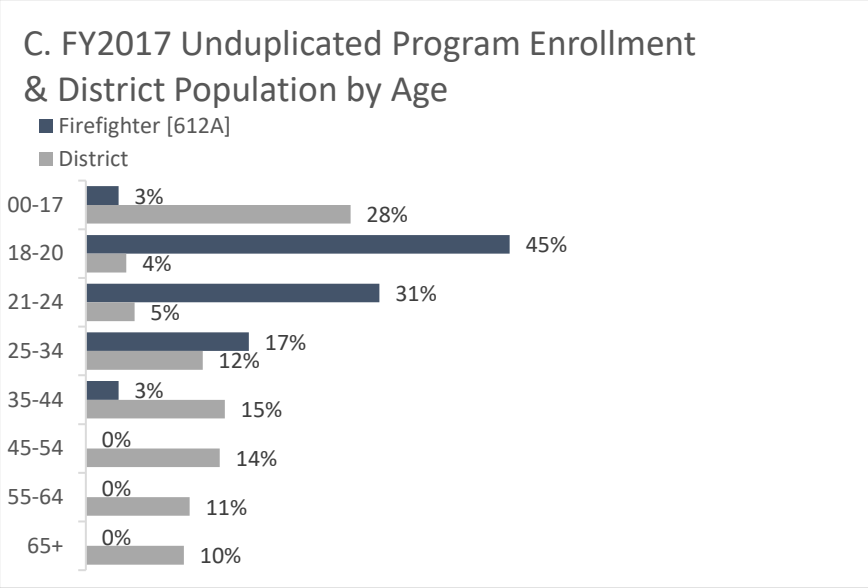
Fire Officer I [613C]
There are too few students in this major to compare to the overall district population.



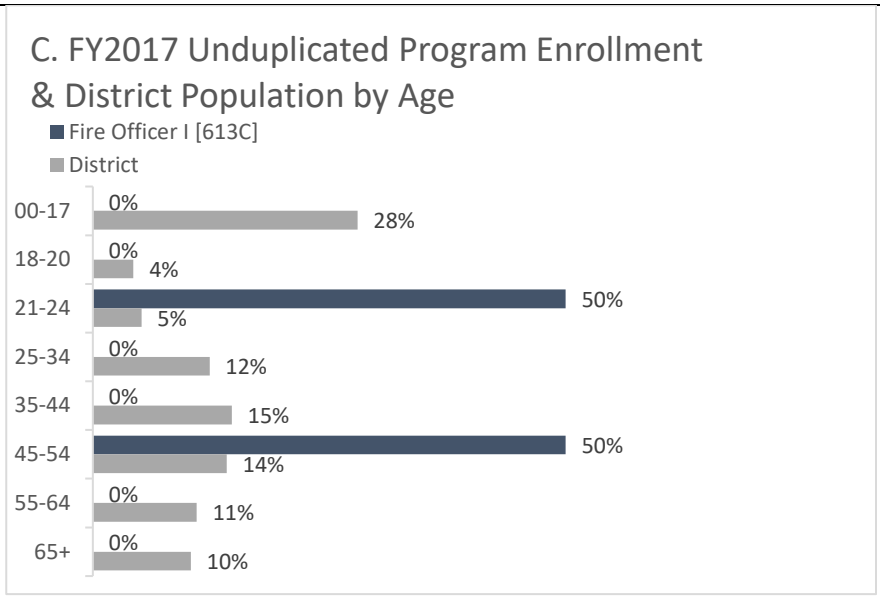
AAS Fire Science Technology [610A]
This program's enrollment disproportionately has fewer 00-17 and 55-64 year olds and more 18-20 year olds. 18-20 year olds are also the largest category compared to the overall district population's largest category of 00-17.



Firefighter [612A]



Fire Officer I [613C]
There are too few students in this major to compare to the overall district population.



Review Results	
Action	☒ Continued with Minor Improvements ☐ Significantly Modified ☐ Placed on Inactive Status ☐Discontinued/Eliminated ☐ Other (please specify)
Summary Rationale Please provide a brief rationale for the chosen action.	This program has stable enrollment in the program, and there is high need within the local area for entry level firefighters. The program needs to increase retention and persistence for students that desire to complete the degree, as there is increasing demand for degrees to access promotional opportunities. This program also needs to increase support to returning firefighters that are using Prior Learning Assessment to complete their degree to access those promotional opportunities.
Intended Action Steps What are the action steps resulting from this review? Please detail a timeline and/or dates for each step.	1. Analyze assessment data for program outcome to demonstrate firefighting competencies by December 1, 2018. 2. Develop a formal mentoring program by May 1, 2019. 3. Create new courses to align with new certification standards by May 1, 2019. 4. Increase support to non-traditional students that are returning to complete their degree through the use of PLA by providing follow up and counseling.

Career & Technical Education				
College Name:	Waubonsee Community College			
Fiscal Year in Review:	2017-2018			
Program Identification Information				
Program Title	*Degree or Cert*	*Total Credit Hours*	*6-Digit CIP Code*	*List All certificate programs that are stackable within the parent degree*
Interpreter Training	**Degree**	**69**	**16.1603**	
Address all fields in the template. If there are certificates and/or other stackable credentials within the program, please be sure to specify and sufficiently address all questions regarding each stackable credential.				
Program Outcomes What are the overarching objectives/goals of the program?	1. Analyze and process the English message to deliver accurately in the ASL message. 2. Analyze and process the ASL message to deliver accurately in the English message. 3. Introduce, reinforce, and assess the protocols used in variety of interpreting settings.			
To what extent are these outcomes being achieved?	Our students meet these outcomes by the end of the program. This is confirmed based on our assessments. In addition, the accuracy required to pass the assessments are rigorous in order to prepare for employment.			
Past Program Review Action What action was reported last time the program was reviewed?	Continued with Minor Improvements			

CTE Program Review Analysis

Complete the following fields and provide concise information where applicable. Please do not insert full data sets but summarize the data to completely answer the questions. Concise tables displaying this data may be attached. The review will be sent back if any of the below fields are left empty or inadequate information is provided.

List all pre-requisites for this program (courses, placement scores, etc.).

Course	Prerequisite
SGN 102 American Sign Language II	C or better in SGN101: American Sign Language I
SGN104 Signs in Everyday Use	C or better in SGN 101 and SGN105 or concurrent enrollment
SGN 105 Linguistics of ASL I	C or better in SGN101 or concurrent enrollment
SGN106 Linguistics of ASL II	C or better in SGN101, SGN104 and SGN105
SGN 108 American Sign Language I	C or better in SGN101, SGN104 and SGN105; C or better in SGN 102 and SGN 106 or concurrent enrollment
SGN110 Introduction to American Deaf Culture	SGN 101 or concurrent enrollment
ITP200 Intro to Interpreting	Program admission and completion of all SGN courses.
ITP210 Etymology for Interpreters	Program admission and completion of all SGN courses.
ITP211 Transliteration I	Program admission and completion of all SGN courses.
ITP212 Transliteration II	ITP200; ITP210; ITP211; ITP221; ITP231
ITP222 Topics in Interpreting	ITP200; ITP210; ITP211; ITP221; ITP231
ITP223 Interpreting II	ITP200; ITP210; ITP211; ITP221; ITP231
ITP230 Specialized Areas of Interpreting	ITP200; ITP210; ITP211; ITP221; ITP231
ITP232 Sign to Voice II	ITP200; ITP210; ITP211; ITP221; ITP231
ITP290 The Interpreter as Practitioner	Successful completion of all ITP courses.

Please list or attach all required courses (including titles) for completion of this program including institution required courses (e.g. student success, first year, general education requirements, etc.).	**First Semester** ..... **15** ENG 101 First-Year Composition I ..... 3 PSY 100 Introduction to Psychology ..... 3 SGN 101 American Sign Language I ..... 3 SGN 104 Signs of Everyday Use ..... 3 SGN 105 Linguistics of ASL I ..... 3 **Second Semester** ..... **15** ENG 102 First-Year Composition II ..... 3 SGN 102 American Sign Language II ..... 3 SGN 106 Linguistics of ASL II ..... 3 SGN 108 Conceptually Accurate Signed English ..... 3 SGN 110 Introduction to American Deaf Culture ..... 3 **Third Semester** ..... **18** ***(All third-semester ITP courses must be taken concurrently.)*** COM 100 Fund. of Speech Communication ..... 3 ITP 200 Introduction to Interpreting ..... 3 ITP 210 Etymology for Interpreters ..... 3 ITP 211 Transliterating I ..... 3 ITP 221 Interpreting I ..... 3 ITP 231 Sign to Voice I ..... 3 **Fourth Semester** ..... **18** ***(All fourth-semester ITP courses must be taken concurrently and after successful completion of all third semester ITP courses.)*** ITP 212 Transliterating II ..... 3 ITP 222 Topics in Interpreting ..... 3 ITP 223 Interpreting II ..... 3 ITP 230 Specialized Areas of Interpreting ..... 3 ITP 232 Sign to Voice II ..... 3 Math or Physical and Life Sciences elective • ..... 3 **Fifth Semester** ..... **3** ITP 290 The Interpreter as Practitioner + ... 3 **PROGRAM TOTAL** **69**
Provide a rational for content/credit hours beyond 30 hours for a certificate or 60 hours for a degree.	As students are gaining a second language, there are multiple courses needed to establish language skills and then becoming proficient in the skill of interpreting. The curriculum aligns with the topics addressed in the licensing test taken post-graduation. The faculty reduced the program by three credit hours in 2016 to the current 69 credit hours. A comparative analysis with other 2 year interpreting programs was undertaken, and it was noted that this program's credit hours is similar to the programs in the state.
INDICATOR 1: NEED	***RESPONSE***
1.1 How strong is the occupational demand for the program?	The program saw higher enrollments of 87 and 61 students in 2013 and 2014. 2015 through 2017 saw enrollments of 26, 20 and 20 correspondingly. Employment trends are difficult to determine since the Bureau of Labor Statistics and economic modeling data combine all translation positions which can include other language Interpreter and translator needs such as Spanish and French. We were able to look specifically at job postings in sign language only and between November 2016 and November 2017 there were approximately 270 unique positions in the Chicago area.

1.2 How has demand changed in the past five years and what is the outlook for the next five years?	The previous five years 2013 to 2018 indicated a 27.9% change with an average of 271 annual openings. Although growth is indicated, these openings could be for other types of translators. This is confirmed when looking at the top common skills promoted in job posting between 2016 and 2018 where 10% or 130 of the 1308 job postings indicated sign language as a requirement. The outlook over the next five years indicates a 17.4% increase with 290 annual openings. Applying the information from the previous five years, we can expect 29 annual openings in the next five years.
1.3 What is the district and/or regional need?	According to economic modeling data, there are currently 264 interpreter/translator related jobs in our district. The data indicates an increase of 19.3% by 2023. Based on job posting information, we expect to have 29 related job openings in our district over the next five years.
1.4 How are students recruited for this program?	Students will be recruited for the program via high school visits, Sign class visits by faculty to inform about the program, and informational nights publicized through high school counselors. Additionally, the program works to maximize relationships in the community that raise the program's reputation.
1.5 Where are students recruited from?	High Schools and open houses to showcase our many programs and services.
1.6 Did the review of program need result in actions or modifications? Please explain.	The review of the program need did not result in actions or modifications.
INDICATOR 2: COST EFFECTIVENESS	***RESPONSE***
2.1 What are the costs associated with this program?	The direct costs associated with the program include: • Faculty salary and benefits (full-time and part-time) • Instructional supplies • Technology, software and services • Publications and dues • Full-time faculty professional development
2.2 How do costs compare to other programs on campus?	The costs associated with this program is $2,211.21 per load hour which is 10% higher than the Institutional average cost of $2,002.00.
2.3 How is the college paying for this program and its costs (e.g. grants, etc.)?	The college pays for this program and its costs through tuition and fees.
2.4 If most of the costs are offset by grant funding, is there a sustainability plan in place in the absence of an outside funding source? Please explain.	Not Applicable as the program is supported by institutional funds.
2.5 Did the review of program cost result in any actions or modifications? Please explain.	The review of cost for the Interpreting Training program did not result in any actions or modifications.

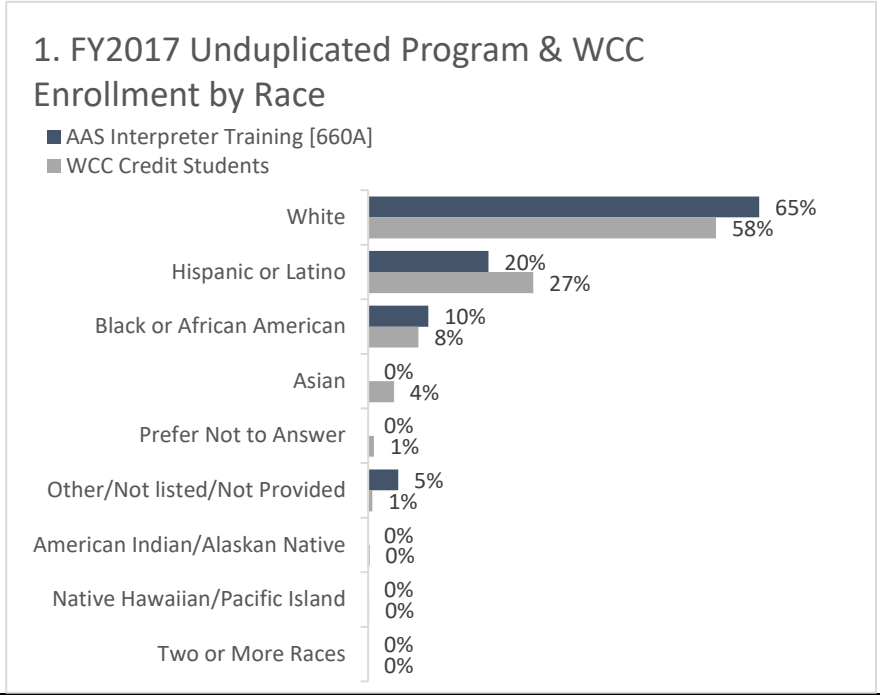
INDICATOR 3: QUALITY	*RESPONSE*
3.1 What are the program's strengths?	Students feel well-prepared to transfer to a 4 year college program. Many schools hire Waubonsee students during the last practicum semester. Students can earn a provisional/intermediate interpreting license upon graduation.
3.2 What are the identified or potential weaknesses of the program?	Lack of a mentoring or employer partnerships for students needing internship experiences. Our enrollment is low. We currently do not have dual credit opportunities. Due to low enrollment, our course offerings are limited with some courses offered only one time per year.
3.3 What are the delivery methods of this program? (e.g. traditional format/online/hybrid/team-teaching etc.)?	Traditional Format
3.4 How does this program fit into a career pathway?	Career Cluster: Education and Training Career Pathway: Professional Support Services CIP Program Title: Sign Language Interpretation and Translation
3.5 What innovations have been implemented or brought to this program that other colleges would want to learn about?	The use of simulations in different scenarios have motivated students, given them insight to how to study better, why they need to practice and a better understanding of the types of interpreting available (business, medical, legal, educational). Our program has collaborated with the Waubonsee nursing program to provide mock interpretation during their simulations. We are using various public events at Waubonsee as opportunities for students to practice interpreting in live situations. We have work closely with GoReact, a video software tool to provide feedback on the software features, making it more appealing for other college Interpreter Training Programs.
3.6 Are there dual credit opportunities? If so please list offerings and the associated high schools.	There aren't any dual credit opportunities associated with this program.
3.7 What work-based learning opportunities are available and integrated into the curriculum?	Students observe interpreters in the field for 20 hours in the first semester of the second year and begin mentored interpreting in the second semester of the second year. Every test is a simulation of a possible work situation.
3.8 Is industry accreditation required for this program (e.g. nursing)? If so, identify the accrediting body. Please also list if the college has chosen to voluntarily seek accreditation (e.g. automotive technology, NATEF).	Industry accreditation isn't required for this program CCIE - Commission on Collegiate Interpreter Education is the industry-recognized accreditation.

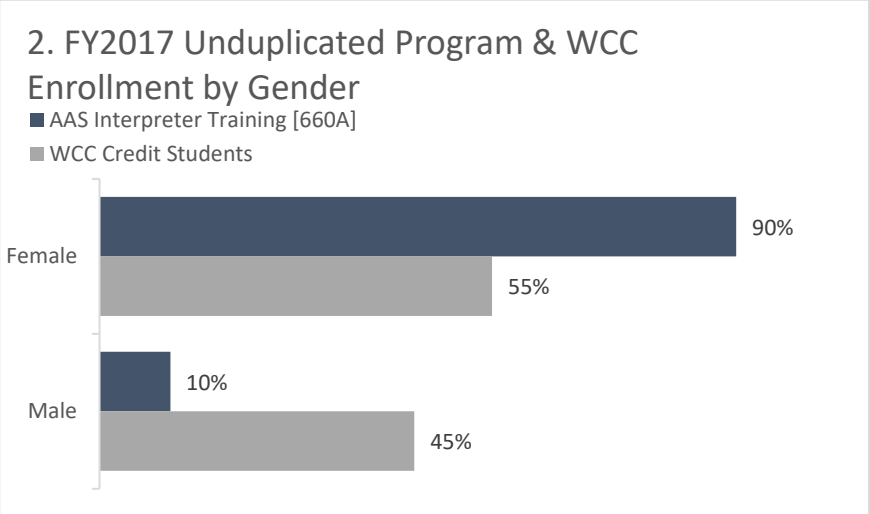
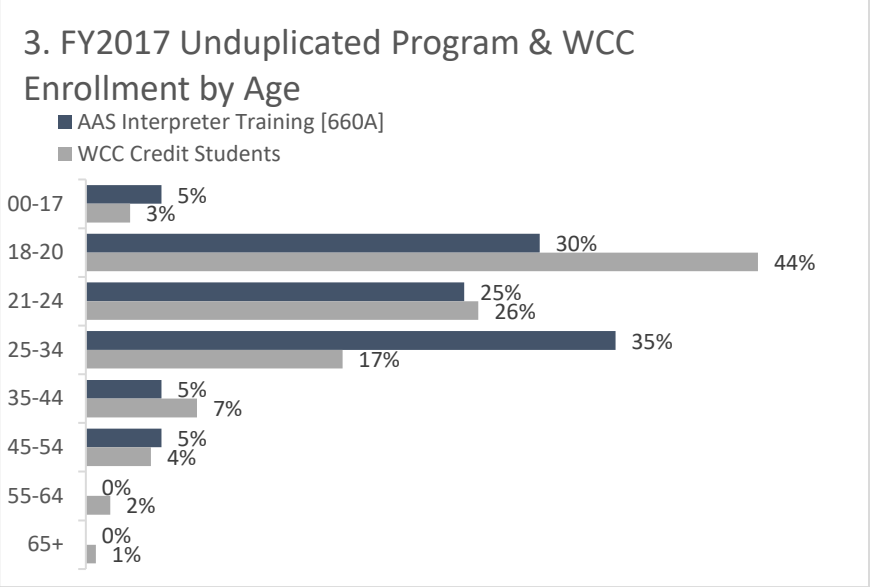
3.9 Are industry-recognized credentials offered? If so, please list.	No. The licensing test is encouraged after program completion.
3.10 Is this an apprenticeship program? If so, please elaborate.	This is not an apprenticeship program.
3.11 If applicable, please list the licensure examination pass rate.	N/A
3.12 What current articulation or cooperative agreements/initiatives are in place for this program?	We currently have a partnership with NIU that allows students who have completed the AAS in Interpreter Training to go on and receive their Bachelor of General studies through the college of Health and Human Sciences.
3.13 Have partnerships been formed since the last review that may increase the quality of the program and its courses? If so, with whom?	We have not formed partnerships since our last review.
3.14 What is the faculty to student ratio for courses in this program? Please provide a range and average.	Min Course Average Class Size 13.0 Max Course Average Class Size 26.7 Average of Course Average Class Size 18.0
3.15 What professional development or training is offered to adjunct and full time faculty that may increase the quality of this program?	Full time and adjunct faculty attend various interpreter conferences and workshops which provide CEUs for interpreting, or language/interpreter training. In addition, full-time faculty meet with new adjuncts and provide complete curriculum, ongoing support and at times, co-teaching to reinforce teaching methods.
3.16 What is the status of the current technology and equipment used for this program?	The technology currently used to record tests and give feedback is GoReact which is widely used by Interpreter Training Programs (ITPs) all over the country. It allows for video, audio, and text feedback. We make use of 21 webcams throughout our lab and classrooms. We currently use a computer lab with 16 stations, 3 study rooms and a control room as well as two classroom computers. However, the sound system in one classroom is not working at the moment. We have portable laptop/digital camera on cart for use in classroom presentation videotaping. This portable system needs to be replaced/updated soon. Otherwise, our IT department keeps the equipment current and running smoothly.
3.17 What assessment methods are used to ensure student success?	Exams are used throughout the program. Students take the Sign Language (SGN) courses prior to taking Interpreter (ITP) courses. The tests that are taken at the end of the SGN courses require high competence in English and a strong vocabulary. We require 12th grade reading level and vocabulary as well as a writing sample that demonstrates strong skills in English. During the program, the tests require the students to construct an accurate message in both English and ASL.

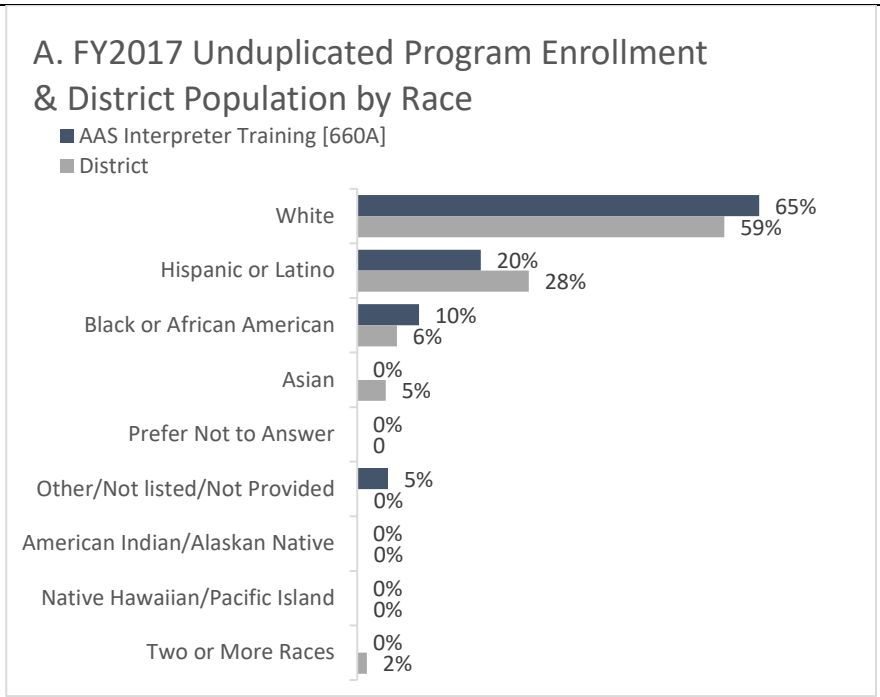
3.18 How satisfied are students with their preparation for employment?	Currently, specific information is not available, however, multiple students have returned to teach, interpret and serve on the advisory boards for the college. The program has a strong alumni relationship. Alumni feedback from the advisory boards is positive. CTE graduates' satisfaction with their preparation for employment was last measured by the ICCB mandated Career and Technical Education Follow-up Survey (ICCB FS submission) in 2016 for 2015 graduates. Since the CTE Survey is no longer mandated or collected by ICCB, WCC is developing a new Alumni Survey which will be administered annually beginning one year post-graduation. The intent is to capture long-range outcomes, including data about satisfaction with WCC's preparation for their employment.
3.19 How is student satisfaction information collected?	WCC uses two institutional level surveys to measure student satisfaction indicators: the Student Satisfaction Inventory (SSI) and the Community College Survey of Student Engagement (CCSSE). In addition, a graduating student survey was piloted in 2017. Spring 2018 the survey will be administered to all students completing petitions to graduate.
3.20 How are employers engaged in this program? (e.g. curriculum design, review, placement, work-based learning opportunities)	Our advisory board has helped to shape curriculum through feedback on graduates and ongoing issues in the field that all programs try to address. A few employers regularly present during the year to inform about that area of interpreting and familiarize our students with how to navigate specialized areas. We also work closely with local co-ops to make practicum opportunities available to students during the last two semesters.
3.21 How often does the program advisory committee meet?	Annually
3.22 How satisfied are employers in the preparation of the program's graduates?	We have anecdotal evidence of satisfaction with our graduates and continue to work on a formal process to survey employer satisfaction.
3.23 How is employer satisfaction information collected?	We survey employers at our employer fair and advisory board but this does not provide enough data to be significant.
3.24 Did the review of program quality result in any actions or modifications? Please explain.	The review of program quality did not result in any actions or modifications.

DATA ANALYSIS FOR CTE PROGRAM REVIEW	
Please complete for each program reviewed. Colleges may report aggregated data from the parent program or report on enrollment and completion data individually for each certificate within the program. Provide the most recent 5 year longitudinal data available.	
CTE PROGRAM	Interpreter Training

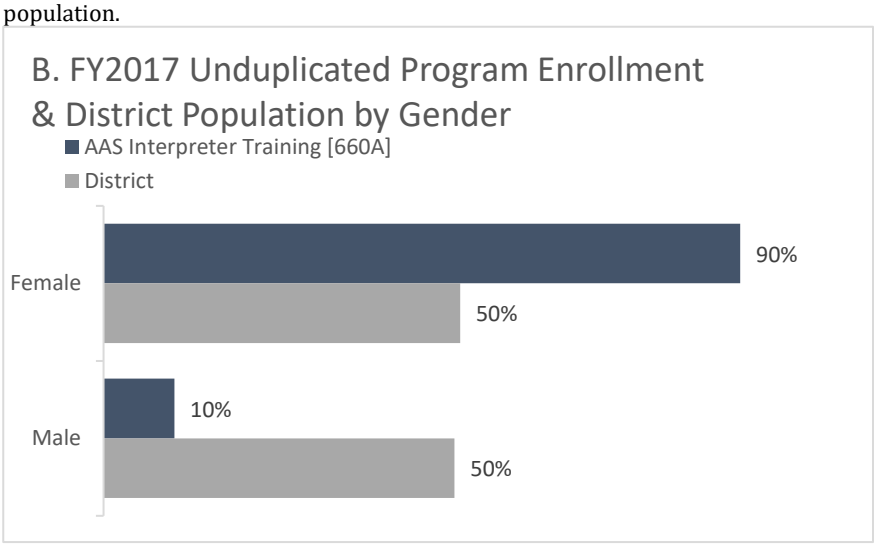
CIP Code	16.1603				
	Year 1 (FY13)	*Year 2 (FY14)*	*Year 3 (FY15)*	*Year 4 (FY16)*	*Year 5 (FY17)*
Number of Students Enrolled	87	61	26	20	20
Number of Completers	11	2	8	6	6
Other (Please identify)					

How does the data support the program goals? Elaborate.	Our current goals are based on total credit enrollment. We are currently defining program goals as part of our continuous improvement process. Beginning fall 2018 we will implement program admissions goals.
What disaggregated data was reviewed?	Data reviewed was retrieved from the Banner Student System. Students who selected the legal Interpreting as a program of study were included in this report.
Were there gaps in the data? Please explain.	Students are provided the opportunity to select their program of study on the New Student Information Form (NSIF) upon entry at Waubonsee. Students can change their program at any time online. There may have been students not included in the analysis because they did not select Legal Interpreting as their program of study.
What is the college doing to overcome any identifiable gaps?	Waubonsee is reviewing our intake process and analyzing how major codes are defined and updated when students change their program of study from their initial selection on the New Student Information Form.
Are the students served in this program representative of the total student population? Please explain.	This program's enrollment aligns with the college's population with the largest representation from White students and the second largest population from Hispanic or Latino students. 

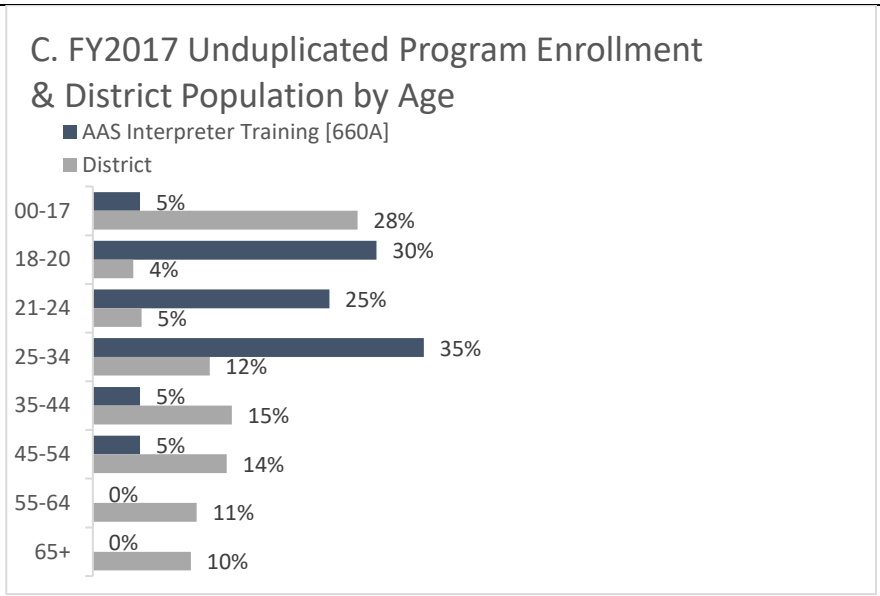
	The program's enrollment is overwhelmingly female compared to the college's population.  This program's enrollment disproportionately has fewer 18-20 year olds and more 25-34 year olds compared to the college's population. The largest representation is the 25-34 category. 
Are the students served in this program representative of the district population? Please explain.	This program's enrollment aligns with the district's population with the largest representation from White students and the second largest population from Hispanic or Latino students.



This program's enrollment is overwhelmingly female compared to the district's population.



This program's enrollment disproportionately has fewer 00-17 year olds and more 18-20 and 25-34 year olds. 25-34 year olds are also the largest category compared to the overall district population's largest category of 00-17. This is perhaps a good program for non-traditional students.



Review Results	
Action	☒ Continued with Minor Improvements ☐ Significantly Modified ☐ Placed on Inactive Status ☐Discontinued/Eliminated ☐ Other (please specify)
Summary Rationale Please provide a brief rationale for the chosen action.	There is a high need for qualified candidates for employment in this field, as evidenced by the advisory committee and local job postings.
Intended Action Steps What are the action steps resulting from this review? Please detail a timeline and/or dates for each step.	1. Collect and analyze assessment data for our program outcome to Analyze and process the English message to deliver accurately in the ASL message by December 2018. 2. Faculty will meet with the High School Partnerships Manager to discuss potentially increasing relationships with secondary schools before October 2018. 3. The faculty will establish an informational night at downtown campus for high school students by December 2018. 4. Faculty will host informational nights for current SGN101 and SGN102 students each semester (spring and fall) in order to encourage current sign language students to continue in their studies. 5. Faculty will review retention activities for students in SGN106 and SGN108, and meet with Counseling and Advising personnel to identify better ways to use support services to retain these students into the interpreting program.

Career & Technical Education

COLLEGE NAME:	Waubonsee Community College
FISCAL YEAR IN REVIEW:	2017-2018

PROGRAM IDENTIFICATION INFORMATION

PROGRAM TITLE	*DEGREE OR CERT*	*TOTAL CREDIT HOURS*	*6-DIGIT CIP CODE*	*LIST ALL CERTIFICATE PROGRAMS THAT ARE STACKABLE WITHIN THE PARENT DEGREE*
Legal Interpreting	**Cert**	**16.5**	**16.0103**	

Address all fields in the template. If there are certificates and/or other stackable credentials within the program, please be sure to specify and sufficiently address all questions regarding each stackable credential.

Program Outcomes What are the overarching objectives/goals of the program?	1. Explain the roles and responsibilities of the interpreter in a legal setting. 2. Interpret basic legal concepts from Spanish to English and English to Spanish 3. Evaluate ethical situations using the code of professional conduct.
To what extent are these outcomes being achieved?	We are beginning to gather assessment data on our program this spring 2018 and will analyze the data and prepare improvement plans in December 2018. This is part of a new systematic process at Waubonsee to assess our courses and programs.
Past Program Review Action What action was reported last time the program was reviewed?	☒ Continued with Minor Improvements

CTE PROGRAM REVIEW ANALYSIS

Complete the following fields and provide concise information where applicable. Please do not insert full data sets but summarize the data to completely answer the questions. Concise tables displaying this data may be attached. The review will be sent back if any of the below fields are left empty or inadequate information is provided.

List all pre-requisites for this program (courses, placement scores, etc.).	LGI 105: Prereq: C or better in LGI100; native or near-native fluency in Spanish and English LGI 110: Prereq: C or better in LGI100. LGI 290: Prereq: Successful completion of all other program courses or concurrent enrollment.

Please list or attach all required courses (including titles) for completion of this program including institution required courses (e.g. student success, first year, general education requirements, etc.).	**Legal Interpreting Course Requirements** CRJ 120 The American Court System .....3 LGI 100 Introduction to Legal Interpreting: English/Spanish .....3 LGI 105 Legal System and Terminology: English/Spanish.....3 LGI 110 Legal Interpreting: Simultaneous, Consecutive and Sight: English/Spanish .....3 LGI 120 Introduction to Legal Translation: English/Spanish..... 3 LGI 290 Legal Interpreting Seminar and Field Experience: English/Spanish ..... 1.5 PROGRAM TOTAL..... 16.5
Provide a rational for content/credit hours beyond 30 hours for a certificate or 60 hours for a degree.	Not Applicable.
INDICATOR 1: NEED	***RESPONSE***
1.1 How strong is the occupational demand for the program?	There is a strong demand for legal interpreters. In 2015, there were 161 annual openings and only four regional program completions. In addition, the median hourly earnings for this position is $20.61 an hour which is $8.08 higher than the living wage for our community. Demand in the State of Illinois has remained steady due to changes in the Administrative Office of Illinois Courts that now requires certification in order to work as an interpreter in any Illinois courts. This certification requirement has limited the available interpreters for open positions. New legal interpreters will now need to obtain certification, which can be achieved through experience or taking coursework. The Legal Interpreting Certificate provides this coursework to prepare students for certification.
1.2 How has demand changed in the past five years and what is the outlook for the next five years?	Although the demand for legal interpreting was very strong with an increase of 28.9% between the years of 2013 and 2018, there were less than 100 annual openings. Economic modeling data projects the interpreters and translation occupation to grow faster than the average through 2023 with a 6.1% increase expected.
1.3 What is the district and/or regional need?	Counties in the Waubonsee district currently include 1,770 jobs with an expected increase of 55 jobs or 3.2% by 2023.
1.4 How are students recruited for this program?	Students see staff at high school career fairs. Working interpreters receive marketing materials through email, their professional organization CHICATA, and from word of mouth of successful graduates and instructors.
1.5 Where are students recruited from?	Students are recruited from local high schools, and also from the interpreter profession of working interpreters that need to become certified.
1.6 Did the review of program need result in actions or modifications? Please explain.	The review of the Legal Interpreting program did not result in actions or modifications.
INDICATOR 2: COST EFFECTIVENESS	***RESPONSE***

2.1 What are the costs associated with this program?	The direct costs associated with the program include: • Adjunct faculty salary • Instructional supplies
2.2 How do costs compare to other programs on campus?	The program cost per load hour is $1405.34, which is 30% lower than the institutional average of $2002.00.
2.3 How is the college paying for this program and its costs (e.g. grants, etc.)?	The college pays for this from tuition and fees.
2.4 If most of the costs are offset by grant funding, is there a sustainability plan in place in the absence of an outside funding source? Please explain.	Not Applicable as the program is supported by institutional funds.
2.5 Did the review of program cost result in any actions or modifications? Please explain.	The review of cost for the legal interpreting program did not result in any actions or modifications.
INDICATOR 3: QUALITY	***RESPONSE***
3.1 What are the program's strengths?	This program has a close relationship with employers and the Administrative Office of the Illinois Courts (AOIC). Additionally, it is a small program with dedicated instructors who know students individually.
3.2 What are the identified or potential weaknesses of the program?	This program is a small program, and externship sites are limited. The population that takes these classes often have financial or other barriers that prevent them from completing the program. Due to the small cohort, this program is only offered on Saturdays and in the evening. There are not as many support services offered for students during the scheduled times.
3.3 What are the delivery methods of this program? (e.g. traditional format/online/hybrid/team-teaching etc.)?	This program is offered in a traditional format.
3.4 How does this program fit into a career pathway?	Career Cluster: Education and Training Career Pathway: Teaching and Training CIP Program Title: Language Interpretation and Translation.
3.5 What innovations have been implemented or brought to this program that other colleges would want to learn about?	A partnership has been developed with the Administrative Office of Illinois Courts (AOIC). Through an affiliation agreement, their orientation and testing for certification is offered on our campus. Additionally, we use their orientation materials in our introductory classes. We employ adjunct staff that are also trainers for the AOIC.
3.6 Are there dual credit opportunities? If so please list offerings and the associated high schools.	There aren't dual credit opportunities in this program.
3.7 What work-based learning opportunities are available and integrated into the curriculum?	Students participate in an 80 hour internship during the last course, LGI290 Legal Interpreting Externship. They participate in this externship in the local courts, the Voluntary Income Tax Assistance (VITA) program, and in local law offices.

3.8 Is industry accreditation required for this program (e.g. nursing)? If so, identify the accrediting body. Please also list if the college has chosen to voluntarily seek accreditation (e.g. automotive technology, NATEF).	An industry accreditation is not required for this program.
3.9 Are industry-recognized credentials offered? If so, please list.	There is a certification by the Administrative Office of Illinois Courts (AOIC). We encourage our students to become registered by the AOIC. They do this by participating in the orientation and passing a written test which is the first step to becoming certified. After several years of oral practice, they can take the AOIC or US Courts oral tests. They are extremely difficult; many interpreters with 10+ years of experience do not pass them.
3.10 Is this an apprenticeship program? If so, please elaborate.	Legal Interpreting is not an apprenticeship program.
3.11 If applicable, please list the licensure examination pass rate.	N/A
3.12 What current articulation or cooperative agreements/initiatives are in place for this program?	N/A
3.13 Have partnerships been formed since the last review that may increase the quality of the program and its courses? If so, with whom?	Waubonsee Community College has an affiliation agreement with the Administrative Office of Illinois Courts (AOIC) to allow them to conduct their testing on the campus. Additional agreements have been developed with Prairie State Legal Services and Gil Law Group for externship placements.
3.14 What is the faculty to student ratio for courses in this program? Please provide a range and average.	Total End of Term Program Enrollment 157 Courses In Program (Ran FY2017) 5 Min Course Average Class Size 13 Max Course Average Class Size 27 Average of Course Average Class Size 18
3.15 What professional development or training is offered to adjunct and full time faculty that may increase the quality of this program?	Waubonsee provides face-to-face training sessions, e-learnings, job aids and one-on-one appointments to all employees of the college. Topics include Blackboard training and support, instructional design, classroom management strategies. In addition, a three day orientation is offered for faculty at the beginning of each semester which provides professional development opportunities. Full-time faculty are also provided with professional development funds to attend discipline specific meetings and conferences provided by outside organizations. Several new positions were recently created to focus on faculty development at the college. These include a Dean of Faculty Development, an Assistant Dean for Online Learning and Flexible Delivery and three faculty liaisons to focus on Faculty Development and engagement.
3.16 What is the status of the current technology and equipment used for this program?	There is little technology required to offer this program. Courses use Ecoo360, a video capturing software in the upper level courses. We also use an Interpreting Lab located at our downtown Aurora campus. Overall, the technology and equipment is in good repair.

3.17 What assessment methods are used to ensure student success?	The instructors have created standardized testing that is given at the end of each course. The instructors meet annually to discuss student outcomes and needs of the program.
3.18 How satisfied are students with their preparation for employment?	CTE graduates' satisfaction with their preparation for employment was last measured by the ICCB mandated Career and Technical Education Follow-up Survey (ICCB FS submission) in 2016 for 2015 graduates. Since the CTE Survey is no longer mandated or collected by ICCB, WCC is developing a new Alumni Survey which will be administered annually beginning one year post-graduation. The intent is to capture long-range outcomes, including data about satisfaction with WCC's preparation for their employment.
3.19 How is student satisfaction information collected?	WCC uses two institutional level surveys to measure student satisfaction indicators: the Student Satisfaction Inventory (SSI) and the Community College Survey of Student Engagement (CCSSE). In addition, a graduating student survey was piloted in 2017. Spring 2018 the survey will be administered to all students completing petitions to graduate.
3.20 How are employers engaged in this program? (e.g. curriculum design, review, placement, work-based learning opportunities)	Administration and faculty have had one on one meetings with the Administrative Office of Illinois Courts to gain insight into the needed curriculum design to align the program with the certification process. Additionally, externship sites have ongoing one on one contact with administrators and instructors regarding curriculum design, placement, and work-based learning opportunities.
3.21 How often does the program advisory committee meet?	The program advisory committee meets annually.
3.22 How satisfied are employers in the preparation of the program's graduates?	We have anecdotal evidence of satisfaction with our graduates and continue to work on a formal process to survey employer satisfaction.
3.23 How is employer satisfaction information collected?	We survey employers at our employer fair but this does not provide enough data to be significant.
3.24 Did the review of program quality result in any actions or modifications? Please explain.	The review of program quality did not result in any actions or modifications.

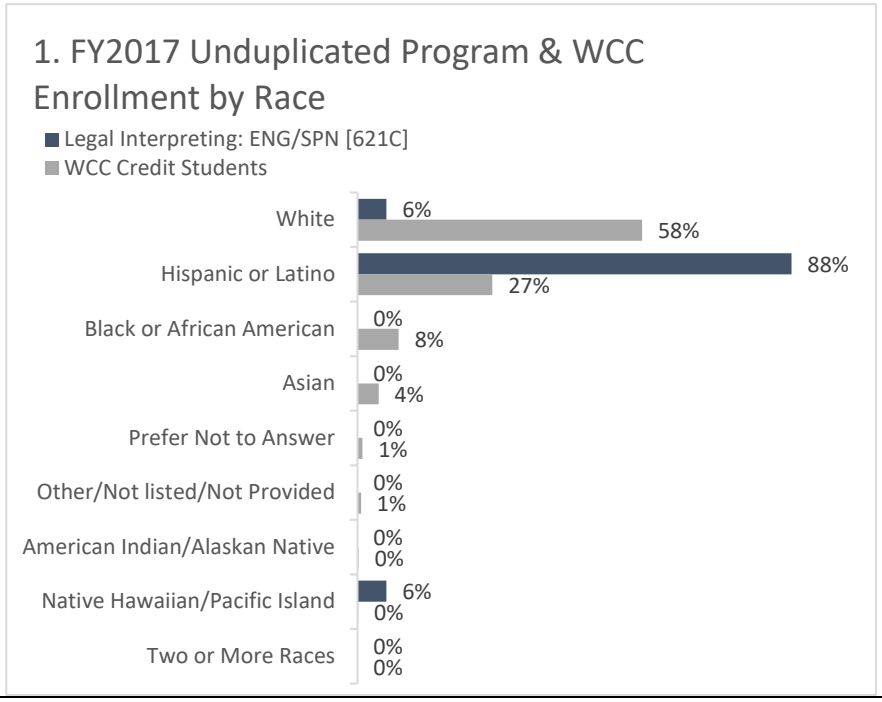
DATA ANALYSIS FOR CTE PROGRAM REVIEW

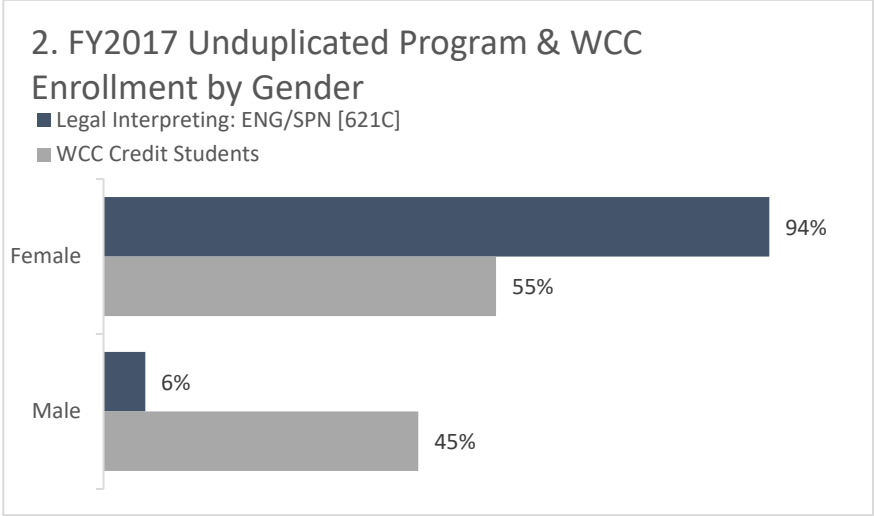
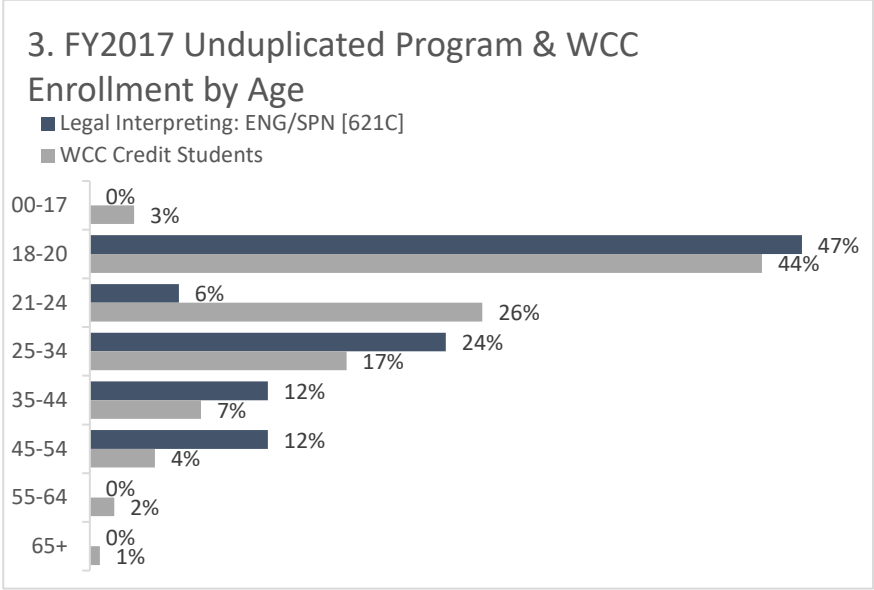
Please complete for each program reviewed. Colleges may report aggregated data from the parent program or report on enrollment and completion data individually for each certificate within the program. Provide the most recent 5 year longitudinal data available.

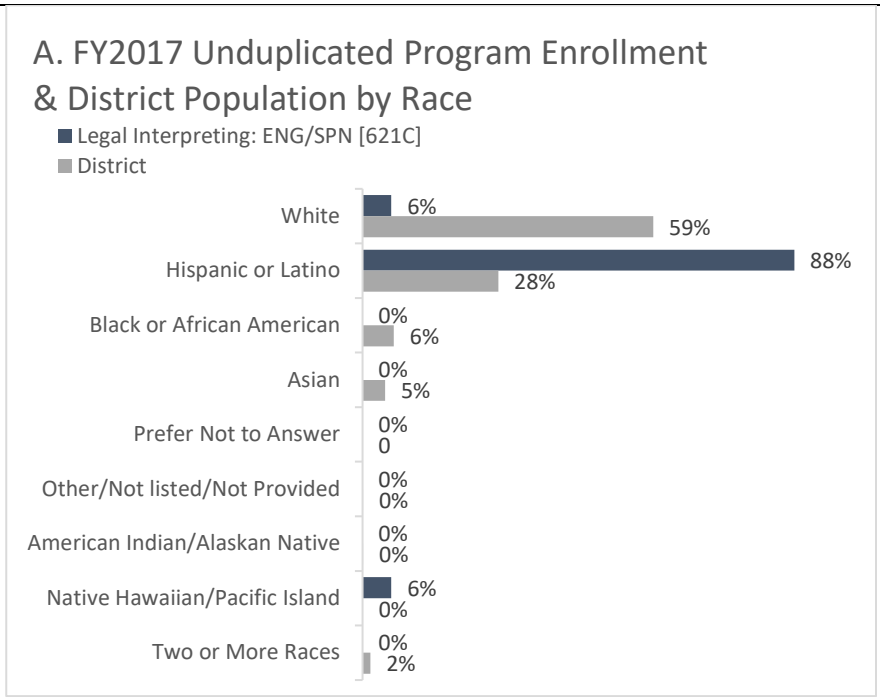
CTE PROGRAM	Legal Interpreting Certificate				
CIP CODE	16.0103				
	YEAR1 (FY13)	*YEAR 2 (FY14)*	*YEAR 3 (FY15)*	*YEAR 4 (FY16)*	*YEAR 5 (FY17)*

Number of Students Enrolled	0	0	0	9	17
Number of Completers	0	0	0	6	5
Other (Please identify)					

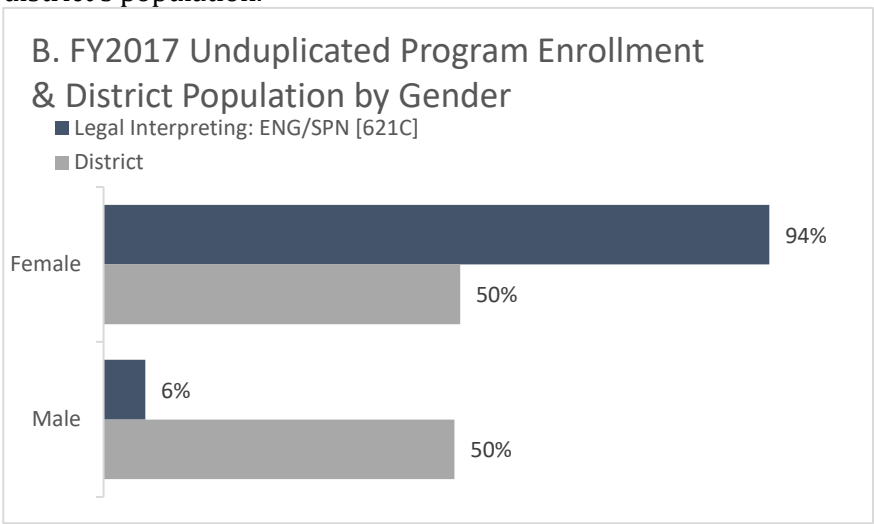
How does the data support the program goals? Elaborate.	Waubonsee has not determined program goals in the area of enrollment and completion. Our current goals are based on total credit enrollment. We are currently defining program goals as part of our continuous improvement process. Beginning fall 2018 we will implement program admissions goals.
What disaggregated data was reviewed?	Data reviewed was retrieved from the Banner Student System. Students who selected the legal Interpreting as a program of study were included in this report.
Were there gaps in the data? Please explain.	Students are provided the opportunity to select their program of study on the New Student Information Form (NSIF) upon entry at Waubonsee. Students can change their program at any time online. There may have been students not included in the analysis because they did not select Legal Interpreting as their program of study.
What is the college doing to overcome any identifiable gaps?	Waubonsee is reviewing our intake process and analyzing how major codes are defined and updated when students change their program of study from their initial selection on the New Student Information Form.
Are the students served in this program representative of the total student population? Please explain.	This program's enrollment disproportionately have fewer White students and more Hispanic or Latino students compared to the overall WCC population, and the largest representation is first from Hispanic or Latino students, then White students.



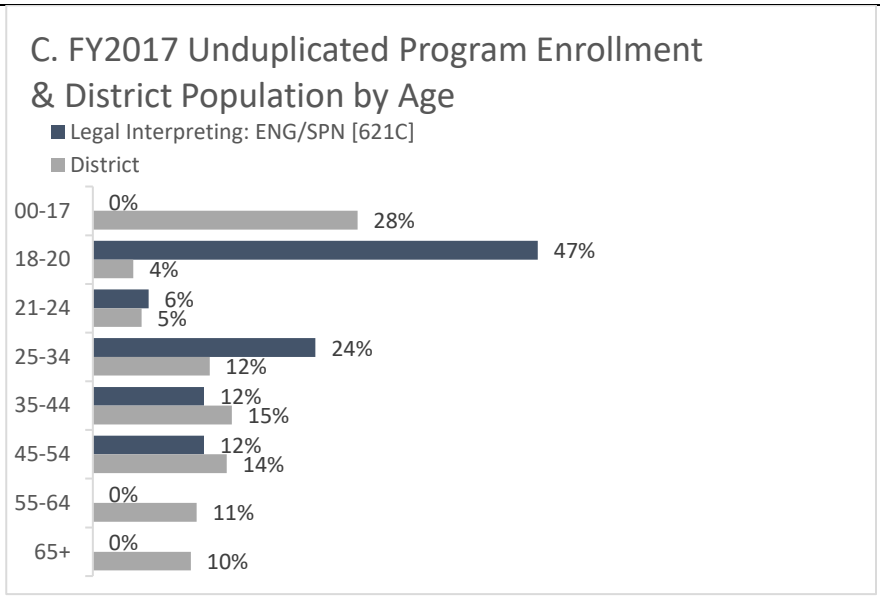
	The program's enrollment is overwhelmingly female compared to the college's population.  This program's enrollment aligns with the college's population with the largest representation from 18-20 year old students, though the second largest population is from 25-34 year old students. 
Are the students served in this program representative of the district population? Please explain.	This program's enrollment disproportionately have fewer White students and more Hispanic or Latino students compared to the overall WCC population, and the largest representation is first from Hispanic or Latino students, then White students.



This program's enrollment is overwhelmingly female compared to the district's population.



This program's enrollment disproportionately has fewer 00-17 year olds and more 18-20 year olds. 18-20 year olds are also the largest category compared to the overall district population's largest category of 00-17.



REVIEW RESULTS	
Action	☒ Continued with Minor Improvements ☐ Significantly Modified ☐ Placed on Inactive Status ☐Discontinued/Eliminated ☐ Other (please specify)
Summary Rationale Please provide a brief rationale for the chosen action.	There is a demand for the program in our community. In addition, it is the only legal interpreting certificate program in the Illinois Community College system. Other colleges offer courses, but do not offer a certificate specifically in legal interpreting.
Intended Action Steps What are the action steps resulting from this review? Please detail a timeline and/or dates for each step.	Since we do not have a full-time faculty member, program assessment has not been a coordinated effort. Currently courses are assessed but information gained from a review at the program level could be beneficial. 1. Collect and analyze assessment data for program outcome #1 by December 2018 2. Review the assessment offered for program outcome #2, and begin to collect data on this outcome by January 2019. 3. Continue to engage annually with our Advisory Board for continuous improvement of the program. An advisory meeting will be scheduled for Spring 2019. 4. Faculty will meet with Counseling and Advising staff to become aware of support services that may benefit the students in this program and to collaborate to increase access of these students to these services before December 2018.

Career & Technical Education

COLLEGE NAME:	Waubonsee Community College
FISCAL YEAR IN REVIEW:	2017-2018

PROGRAM IDENTIFICATION INFORMATION

PROGRAM TITLE	*DEGREE OR CERT*	*TOTAL CREDIT HOURS*	*6-DIGIT CIP CODE*	*LIST ALL CERTIFICATE PROGRAMS THAT ARE STACKABLE WITHIN THE PARENT DEGREE*
Surgical Technology	**Cert**	**32.5**	**51.0909**	

Address all fields in the template. If there are certificates and/or other stackable credentials within the program, please be sure to specify and sufficiently address all questions regarding each stackable credential.

Program Outcomes What are the overarching objectives/goals of the program?	1. Apply appropriate methods of decontamination or sterilization. 2. Apply the principles of aseptic technique and basic preparation skills primarily in the sterile role. 3. Demonstrate preoperative preparation for surgery. 4. Describe the specialized roles in the perioperative setting. 5. Identify moral, legal or ethical responsibilities to the patient.
To what extent are these outcomes being achieved?	Based on individual course assessment we believe that these outcomes are being achieved. This academic year we are collecting information in the aggregate and will have documented evidence of achievement to make curriculum improvements if necessary.
Past Program Review Action What action was reported last time the program was reviewed?	Continued with Minor Improvements

CTE PROGRAM REVIEW ANALYSIS

Complete the following fields and provide concise information where applicable. Please do not insert full data sets but summarize the data to completely answer the questions. Concise tables displaying this data may be attached. The review will be sent back if any of the below fields are left empty or inadequate information is provided.

<table>
<tr><td>List all pre-requisites for this program (courses, placement scores, etc.).</td><td>
<table>
<tr><th>Course</th><th>Prerequisite</th></tr>
<tr><td>SUR 100 Principles of Surgical Technology</td><td>Program admission; BIO250, BIO260, and HIT105; or concurrent enrollment.</td></tr>
<tr><td>SUR 110 Surgical Pharmacology</td><td>Program admission; BIO250, BIO260, and HIT105; or concurrent enrollment.</td></tr>
<tr><td>SUR 120 Instrumentation and Practices Common to Surgical Procedures</td><td>Program admission; SUR100.</td></tr>
<tr><td>SUR 150 Health Problems and Surgical Procedures I</td><td>Program admission; SUR100; SUR110; SUR120.</td></tr>
<tr><td>SUR 151 Surgical Tech Externship I</td><td>Program admission; SUR100; SUR110; SUR120.</td></tr>
<tr><td>SUR 200 Health Problems and Surgical Procedures II</td><td>Program admission; SUR120; SUR150; SUR151.</td></tr>
<tr><td>SUR 201 Surgical Tech Externship II</td><td>Program admission; SUR150; SUR151.</td></tr>
<tr><td>SUR 220 Seminar in Surgical Technology</td><td>Program admission; SUR150; SUR151.</td></tr>
</table>
</td></tr>
<tr><td>Please list or attach all required courses (including titles) for completion of this program including institution required courses (e.g. student success, first year, general education requirements, etc.).</td><td>
Fall Semester..... 15
BIO250 Microbiology..... 4
BIO260 Human Structure and Function..... 4
HIT105 Medical Terms for Health Occupations..... 1
SUR100 Principles of Surgical Tech. 4
SUR110 Surgical Pharmacology 2
Spring Semester..... 12
COM125 Communication Strategies for Health Care Careers 2
SUR120 Instrumentation and Practices Common to Surgical Procedures..... 5
SUR150 Health Problems and Surgical Procedures I 2
SUR151 Surgical Tech Externship I 3
Summer Semester 5.5
SUR200 Health Problems and Surgical Procedures II 2
SUR201 Surgical Tech Externship II 3
SUR220 Seminar in Surgical Tech. 0.5
PROGRAM TOTAL..... 32.5
</td></tr>
<tr><td>Provide a rational for content/credit hours beyond 30 hours for a certificate or 60 hours for a degree.</td><td>The Surgical Technology Certificate of Achievement program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) on recommendation of the Accreditation Review Council on Education in Surgical Technology and Surgical Assisting (ARC/STSA) and subsequent credit hours for the program have been approved by CAAHEP to meet the required program learning domains.</td></tr>
<tr><td>INDICATOR 1: NEED</td><td>RESPONSE</td></tr>
</table>

1.1 How strong is the occupational demand for the program?	There is a need for surgical technicians but the demand wouldn't be defined as strong. In 2015, there were 119 annual openings with 152 regional program completions. There were more completions than positions. The higher completions than annual openings may be due to the median hourly earnings for this position of $56.19 an hour which is $43.66 higher than the living wage for our community.
1.2 How has demand changed in the past five years and what is the outlook for the next five years?	The demand for surgical technicians in our region saw increase of 4.6% between the years of 2013 and 2018 which was 9.1% higher than the nation. Economic modeling data projects the surgical technician occupation to grow faster than the average through 2023 with a 7.0% increase expected in the United States.
1.3 What is the district and/or regional need?	In 2018 there were 714 total positions for surgical technicians. In the WCC service area, a 7.4% increase or 53 open positions are projected. This is higher than the State or the region which projects 4.7% and 4.9% increases.
1.4 How are students recruited for this program?	In addition to traditional college recruitment programs, students are also recruited through the Valley Education for Employment System (VALEES), a program that Waubonsee Community College collaborates with which awards college credit for learning experiences at the high school level for instruction (dual enrollment programs). In addition, the college hosts several open houses and events to showcase our many programs and services.
1.5 Where are students recruited from?	Students are recruited at local high schools and affiliated vocational centers through individual college visits, Career and Technical Education Showcase events and college fairs. Waubonsee Community College reaches out to community organizations and local businesses to share information about certificate programs.
1.6 Did the review of program need result in actions or modifications? Please explain.	The Surgical Technology program review did not result in any actions or modifications to the program.
INDICATOR 2: COST EFFECTIVENESS	***RESPONSE***
2.1 What are the costs associated with this program?	The direct costs associated with the program include: • Faculty salary and benefits (full-time and part-time) • Instructional supplies • Technology, software and services • Publications and dues • Full-time faculty professional development
2.2 How do costs compare to other programs on campus?	The costs associated with this program is $1,733.12 per load hour which is 13% less than the institutional average of $2002.00 per load hour.
2.3 How is the college paying for this program and its costs (e.g. grants, etc.)?	The college pays for this program and its costs through tuition and fees.

2.4 If most of the costs are offset by grant funding, is there a sustainability plan in place in the absence of an outside funding source? Please explain.	Not Applicable as the program is supported by institutional funds.
2.5 Did the review of program cost result in any actions or modifications? Please explain.	The review did not result in any cost changes or modifications to the program.
INDICATOR 3: QUALITY	***RESPONSE***
3.1 What are the program's strengths?	The program's strengths are faculty, campus facilities, national accreditation, advisory committee and hospital/surgery center partnerships.
3.2 What are the identified or potential weaknesses of the program?	Areas of improvement include increasing on-campus student embedded tutoring sessions.
3.3 What are the delivery methods of this program? (e.g. traditional format/online/hybrid/team-teaching etc.)?	The delivery methods provided for students in the Surgical Technology program include face-to-face, online, laboratory and clinical experiences.
3.4 How does this program fit into a career pathway?	Career Cluster: Health Sciences Career Pathway: Therapeutic Services CIP Program Title: Surgical Technology/Technologist.
3.5 What innovations have been implemented or brought to this program that other colleges would want to learn about?	Waubonsee Community College partners with Rush-Copley Medical Center and their surgeons, physicians and staff to deliver an integrated, practitioner-teacher model of education and experiences for the surgical technology students. The students spend six months rotating in the operating room and ancillary areas. The hospital's surgical units and outpatient areas serve as the student learning labs. Book knowledge is translated to the perioperative setting. Patient-focused, team-based care is constantly put into practice.
3.6 Are there dual credit opportunities? If so please list offerings and the associated high schools.	The Medical Terms for Health Occupations (HIT 105) course is offered as a dual credit option.
3.7 What work-based learning opportunities are available and integrated into the curriculum?	Students are required to attend two hospital-based clinical operating room rotations (SUR 151 and SUR 201) from March through July each academic year. Students must complete 120 total surgical cases during this time. Students are required to complete 30 cases in general surgery (twenty of these cases must be in the First Scrub Role) and 90 cases in various surgical specialties. The surgical technology program is required to verify through the surgical rotation documentation the student's progression in First and Second scrubbing surgical procedures of increased complexity as he/she moves towards entry-level graduate abilities.

3.8 Is industry accreditation required for this program (e.g. nursing)? If so, identify the accrediting body. Please also list if the college has chosen to voluntarily seek accreditation (e.g. automotive technology, NATEF).	Graduation from an accredited school is a requirement of surgical technology certification. Waubonsee Community College is accredited through the Accreditation Review Council on Education in Surgical Technology and Surgical Assisting (ARC/STSA)
3.9 Are industry-recognized credentials offered? If so, please list.	Graduates who successfully complete the program are eligible to take the national certification exam for Certified Surgical Technologist (CST) offered by the National Board of Surgical Technology and Surgical Assisting (NBSTSA). The certification examinations are administered offsite by appointment only Monday through Saturday at 9:00 a.m. and 1:30 p.m.
3.10 Is this an apprenticeship program? If so, please elaborate.	N/A
3.11 If applicable, please list the licensure examination pass rate.	The 2017 Outcomes Assessment Pass Rate (CST) for the program was 88%, and there are a number of support services available to students so that they can successfully complete the program.
3.12 What current articulation or cooperative agreements/initiatives are in place for this program?	N/A
3.13 Have partnerships been formed since the last review that may increase the quality of the program and its courses? If so, with whom?	Waubonsee Community College's Surgical Technology program has clinical partnerships with Rush-Copley Medical Center, Presence Mercy Medical Center, Northwestern Medicine - Delnor Hospital, Kishwaukee Hospital, Kendall - Pointe Surgery Center, Valley West Hospital and Morris Hospital. Within the past five years, Waubonsee Community College has formed a surgical technology clinical partnership with OSF Saint Anthony Medical Center in Rockford, IL.
3.14 What is the faculty to student ratio for courses in this program? Please provide a range and average.	Total End of Term Program Enrollment 1093.0 Courses In Program (Ran FY2017) 10.0 Min Course Average Class Size 8.0 Max Course Average Class Size 21.0 Average of Course Average Class Size 13.1

3.15 What professional development or training is offered to adjunct and full time faculty that may increase the quality of this program?	Waubonsee provides face-to-face training sessions, e-learnings, job aids and one-on-one appointments to all employees of the college. Topics include Blackboard training and support, instructional design, classroom management strategies. In addition, a three day orientation is offered for faculty at the beginning of each semester which provides professional development opportunities. Full-time faculty are also provided with professional development funds to attend discipline specific meetings and conferences provided by outside organizations. Several new positions were recently created to focus on faculty development at the college. These include a Dean of Faculty Development, an Assistant Dean for Online Learning and Flexible Delivery and three faculty liaisons to focus on Faculty Development and engagement.
3.16 What is the status of the current technology and equipment used for this program?	Based on this review, the Surgical Technology program equipment and technology meet current industry needs.
3.17 What assessment methods are used to ensure student success?	The Waubonsee Community College Surgical Technology program utilizes classroom assessment techniques to assess students' prior knowledge, recall and understanding, assess students' skills in analysis and critical thinking, assess students' skills in synthesis and creative thinking, assess student's skills in problem solving and assess students' skills in application and performance.
3.18 How satisfied are students with their preparation for employment?	CTE graduates' satisfaction with their preparation for employment was last measured by the ICCB mandated Career and Technical Education Follow-up Survey (ICCB FS submission) in 2016 for 2015 graduates. Since the CTE Survey is no longer mandated or collected by ICCB, WCC is developing a new Alumni Survey which will be administered annually beginning one year post-graduation. The intent is to capture long-range outcomes, including data about satisfaction with WCC's preparation for their employment.
3.19 How is student satisfaction information collected?	WCC uses two institutional level surveys to measure student satisfaction indicators: the Student Satisfaction Inventory (SSI) and the Community College Survey of Student Engagement (CCSSE). In addition, a graduating student survey was piloted in 2017. Spring 2018 the survey will be administered to all students completing petitions to graduate.
3.20 How are employers engaged in this program? (e.g. curriculum design, review, placement, work-based learning opportunities)	There are many opportunities for employers to connect with Waubonsee Community College students, faculty and programs. The college hosts several events including job fairs, workshops and career exploration sessions throughout the year. The Waubonsee Community College Surgical Technology program hosts a business advisory committee every fall and spring in addition to distributing Employer Surveys each year to evaluate program graduates in the workplace. The most recent Employer Survey Return Rate of 67% and Employer Satisfaction Rate of 100% meets and exceeds the Accreditation Review Council on Surgical Technology and Surgical Assisting (ARC/STSA) Thresholds of 50% and 85%, respectively.
3.21 How often does the program advisory committee meet?	Twice year (once a semester).

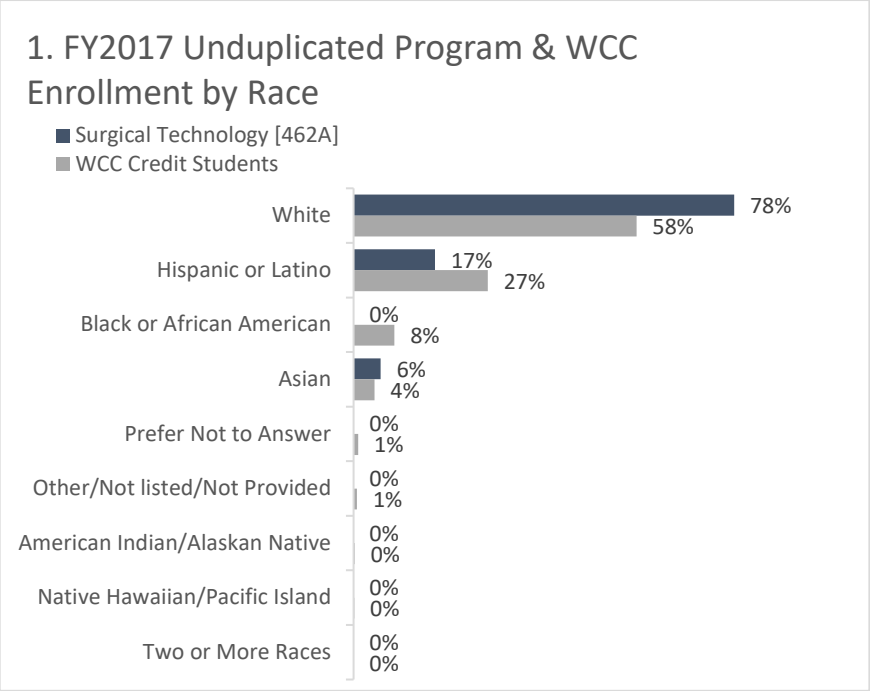
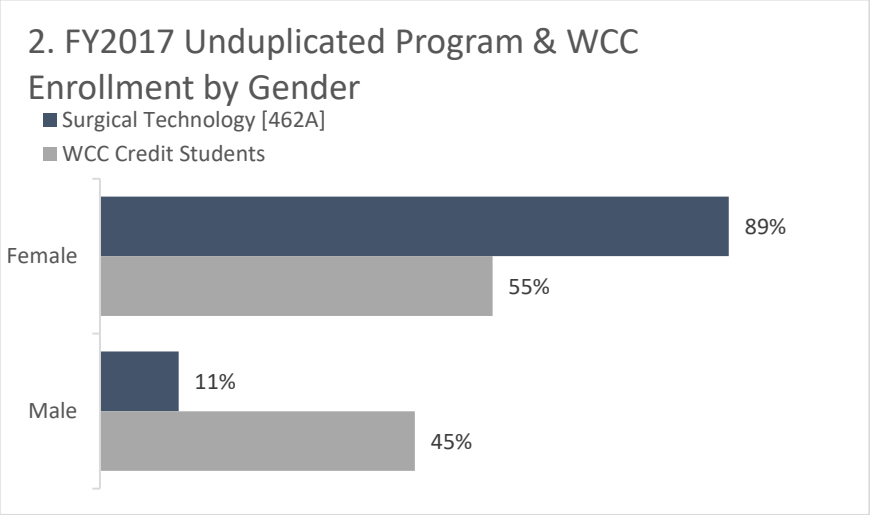
3.22 How satisfied are employers in the preparation of the program's graduates?	Based on the 2017 Accreditation Review Committee for Surgical Technology and Surgical Assisting (ARC/STSA) Annual Report, Waubonsee Community College's Employer Survey Satisfaction of 100% exceeds the committee's employer survey satisfaction threshold of 80%
3.23 How is employer satisfaction information collected?	Employer satisfaction is collected at career fairs, program advisory meetings and annually through an employer survey.
3.24 Did the review of program quality result in any actions or modifications? Please explain.	The review of this program did not result in any actions or modifications.

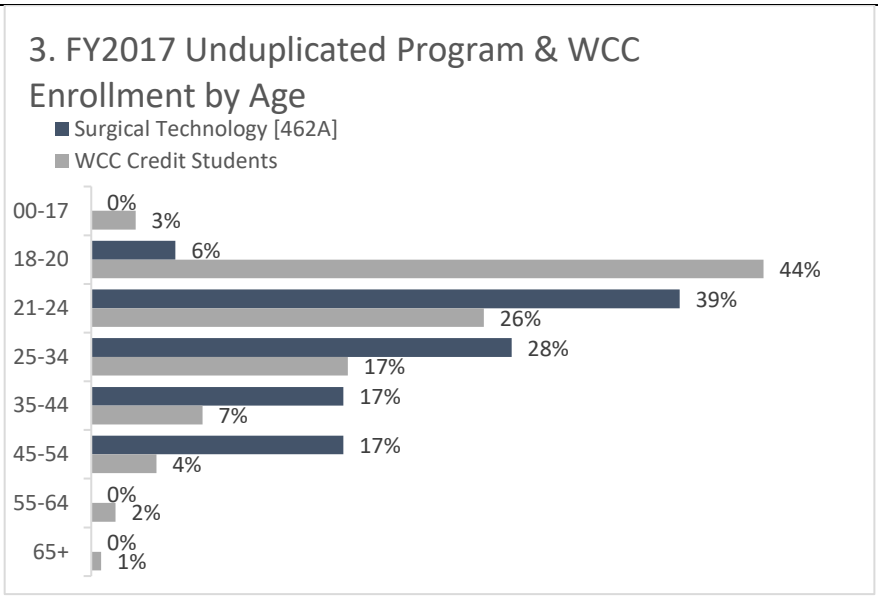
DATA ANALYSIS FOR CTE PROGRAM REVIEW

Please complete for each program reviewed. Colleges may report aggregated data from the parent program or report on enrollment and completion data individually for each certificate within the program. Provide the most recent 5 year longitudinal data available.

CTE PROGRAM	Surgical Technology				
CIP CODE	51.0909				
	YEAR 1 (FY13)	YEAR 2 (FY14)	YEAR 3 (FY15)	YEAR 4 (FY16)	YEAR 5 (FY17)
NUMBER OF STUDENTS ENROLLED	81	74	28	17	18
NUMBER OF COMPLETERS	8	11	9	6	8
OTHER (PLEASE IDENTIFY)					

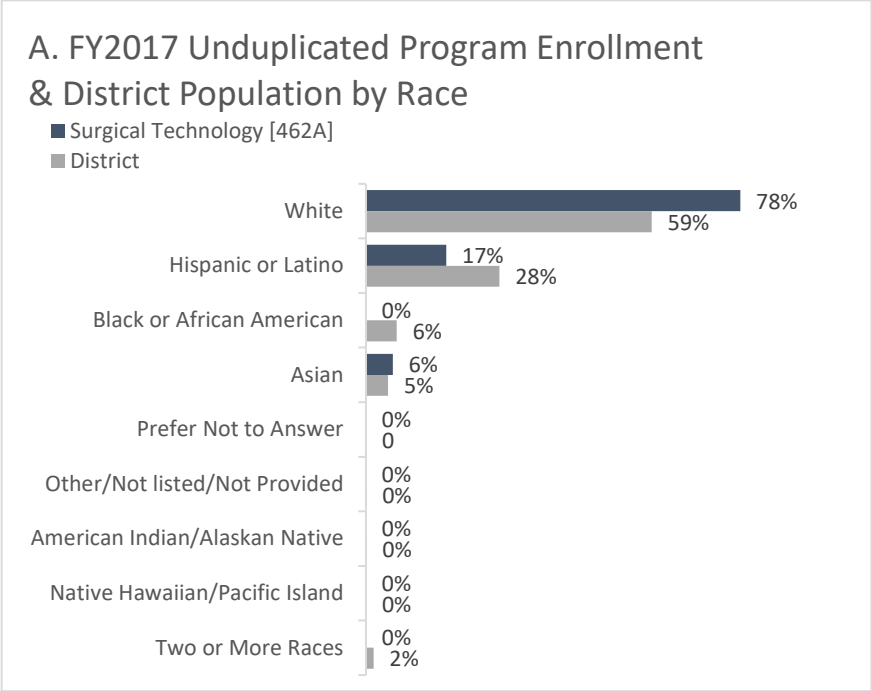
How does the data support the program goals? Elaborate.	Waubonsee has not determined program goals in the area of enrollment and completion. Our current goals are based on total credit enrollment. We are currently defining program goals as part of our continuous improvement process. Beginning fall 2018 we will implement program admissions goals.
What disaggregated data was reviewed?	Data reviewed was retrieved from the Banner Student System. Students who selected the Surgical Technology Certificate as a program of study were included in this report.
Were there gaps in the data? Please explain.	Students are provided the opportunity to select their program of study on the New Student Information Form (NSIF) upon entry at Waubonsee. Students can change their program at any time online. There may have been students not included in the analysis because they did not select Surgical Technology as their program of study.
What is the college doing to overcome any identifiable gaps?	Waubonsee is reviewing our intake process and analyzing how major codes are defined and updated when students change their program of study from their initial selection on the New Student Information Form.

Are the students served in this program representative of the total student population? Please explain.	This program's enrollment aligns with the college's population with the largest representation from White students and the second largest population from Hispanic or Latino students.  The program's enrollment is overwhelmingly female compared to the college's population.  This program's enrollment disproportionately has fewer 18-20 year olds and more 21-24 year olds compared to the college's population. The largest representation is the 21-24 category.

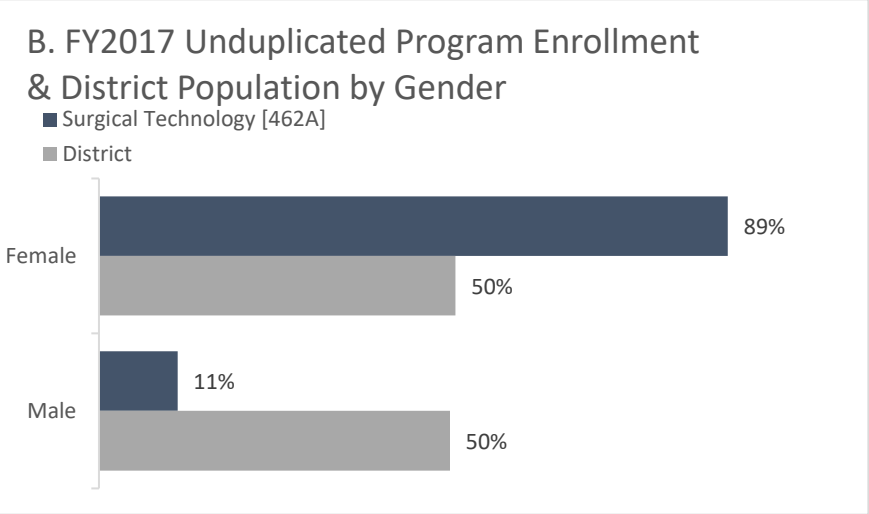


Are the students served in this program representative of the district population? Please explain.

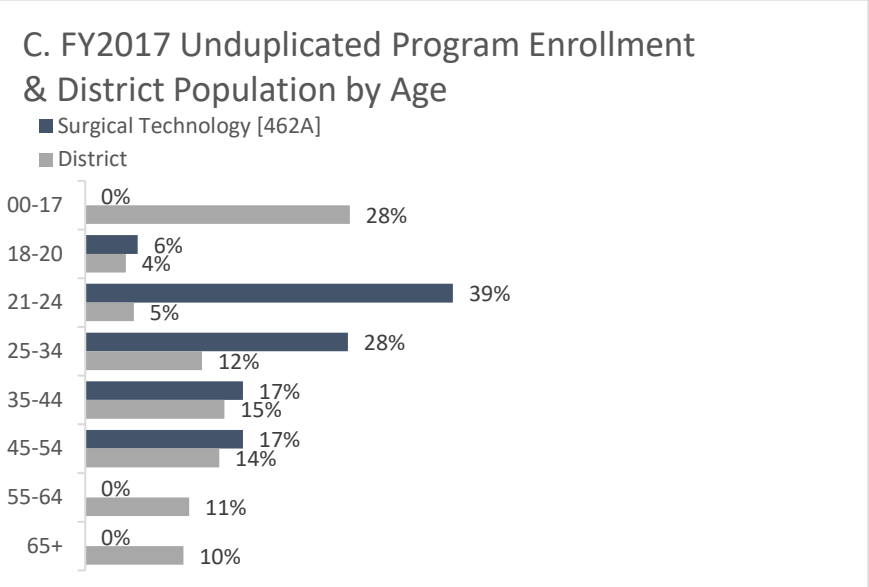
This program's enrollment aligns with the district's population with the largest representation from White students and the second largest population from Hispanic or Latino students.



This program's enrollment is overwhelmingly female compared to the district's population.



This program's enrollment disproportionately has fewer 00-17 year olds and more 21-24 year olds. 21-24 year olds are also the largest category compared to the overall district population's largest category of 00-17.



REVIEW RESULTS	
Action	☒ Continued with Minor Improvements ☐ Significantly Modified ☐ Placed on Inactive Status ☐Discontinued/Eliminated ☐ Other (please specify)
Summary Rationale	Employment projections within the district within for this program indicate a projected growth of 14.5 percent due to replacement of workers exiting the industry and the creation of new jobs. The program will be continued

Please provide a brief rationale for the chosen action.	with minor modifications aimed at strengthening recruitment and completion.
Intended Action Steps What are the action steps resulting from this review? Please detail a timeline and/or dates for each step.	1. Collaborate with faculty and Marketing & Communications to update brochures and website and to identify any other marketing opportunities (DEC 2018 and MAY 2019). 2. Actively participate in high school career events on campus and at the high schools (2018-2019 academic year). 3. Review competitive programs in the area on their delivery methods and schedules (NOV 2018).

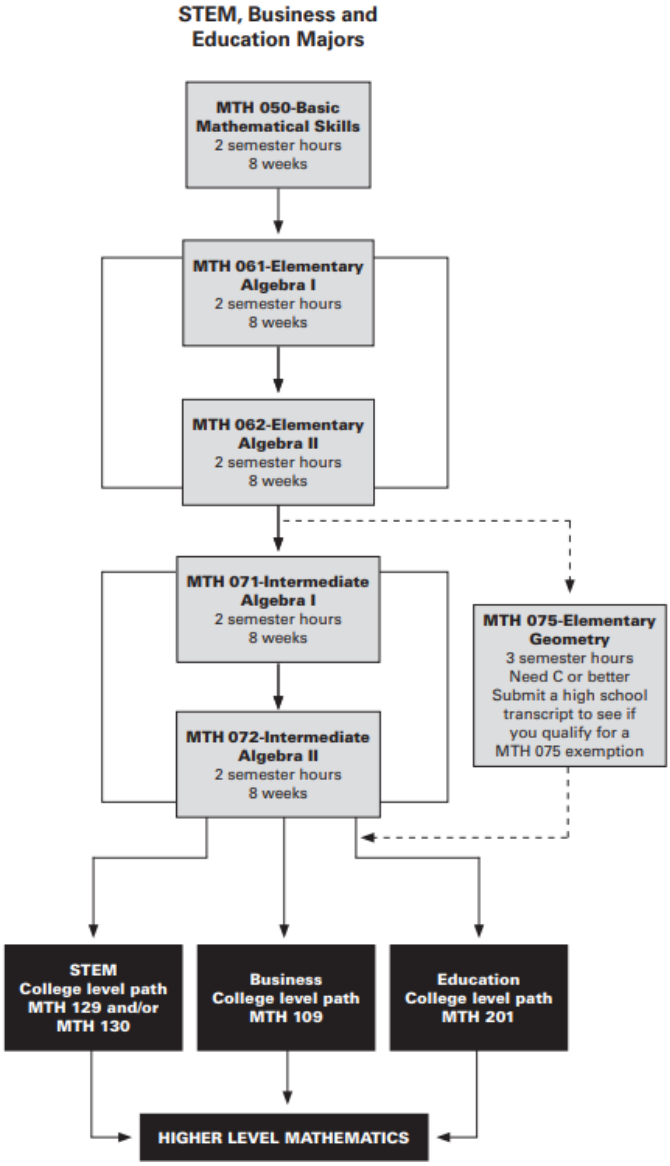
Remedial Math	
COLLEGE NAME:	Waubonsee Community College
FISCAL YEAR IN REVIEW:	2017-2018
REVIEW SUMMARY	
Program Objectives What are the objectives or goals of the program/discipline?	The primary goal of the developmental math program is to prepare students for success in college level courses requiring math skills. To this end, the program is designed to teach students to: 1. Analyze various mathematical problems; 2. Apply appropriate mathematical processes; 3. Communicate a logical solution
To what extent are these objectives or goals being achieved?	The program's goals and objectives are measured using various data elements such as success rates and course outcomes assessment. In 2014, a systematic approach to outcomes assessment was developed by the MTH faculty to assess MTH 061, MTH 062, MTH071 & MTH 072. As an assessment method, faculty use common final exams and a final exam rubric. All the faculty were required to report data for their courses as determined by the course calendar. While this process still exists it is in the early stages. In spring 2016, faculty met to discuss preliminary data and the refinement of methods. According to the data, students in MTH 062 had difficulty demonstrating proficiency related to course outcomes at a higher rate than students in MTH061, MTH 071 & MTH 072. It was concluded that MTH 062 curriculum is more for challenging for students. As a result, there was discussion about prioritizing concepts so that there can be more time devoted to the scaffolding of harder material in MTH 062. As for MTH 061, MTH071 & MTH072, the faculty were satisfied with the results, which highlights that students are performing adequately. In spring 2018, the MTH faculty implemented a systematic approach to outcomes assessment for MTH 066 & MTH 067. Results are being collected and will be discussed at fall 2018 orientation.

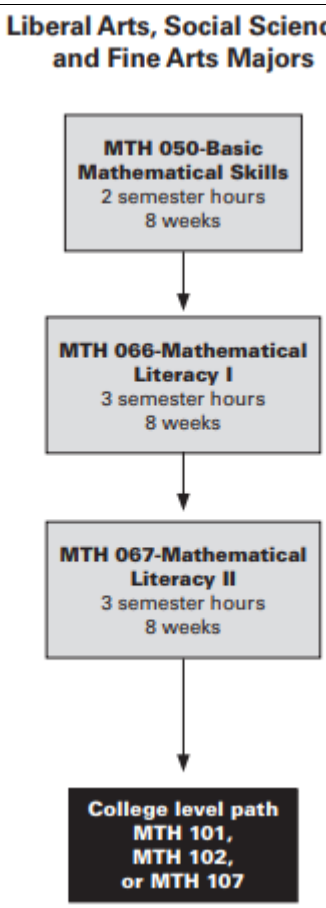
How does this program contribute to other fields and the mission of the college?	As the College aims to provide programs and services that are academically accessible to meet the educational and training needs of a diverse, multicultural population, the developmental math program supports this commitment. Developmental education math courses prepare students who are not considered college ready to succeed in transfer level classes requiring higher level math ability. The program also contributes to goals in the College's strategic plan, in particular, the goal of *Reducing Time to Completion*. The exploration of various approaches to accelerate students through developmental education is meant to directly impact accomplishment of this goal.
Prior Review Update Describe any quality improvements or modifications made since the last review period.	In fall 2013, Elementary Algebra (MTH 060) & Intermediate Algebra (MTH 070) were redesigned from two 4-credit hour courses, into four 2-credit hour courses: Elementary Algebra I (MTH 061), Elementary Algebra II (MTH 062), Intermediate Algebra I (MTH 071) and Intermediate Algebra II (MTH 072). This strategy creates multiple entry points into the curriculum and reduces the time and cost required to complete the developmental sequence. In fall 2014, the Liberal Arts, Social Sciences and Fine Arts Majors Pathway was created to remove barriers for students pursuing a degree path that does not require college algebra. Two new Math Literacy courses were created, MTH 066 and MTH 067. Courses focus teaching students to solve realistic problems, develop number sense and improve overall mathematical literacy. Students are taught through a collaborative learning format using technology, including graphing calculators and spreadsheets. In fall 2016, the number of credits for Basic Math (MTH 050) was reduced from 3 to 2 in order to focus on the most relevant topics. In Spring 2018, the math faculty developed a first day common assessment for MTH 050. This assessment provided students with the opportunity to demonstrate proficiency on the course outcomes. Students who received a score of 8 or higher were afforded the opportunity to enroll in the next math course.

REVIEW ANALYSIS Complete the following fields and provide concise information where applicable. Please do not insert data sets but summarize the data to completely answer the questions. Review will be sent back if any of the below fields are left empty or inadequate information is provided.	
Indicator 1: Need	**Response**

1.1 Detail how the offerings are sufficient and aligned to meet the needs of students across all programs served and supportive academic programs (e.g. tutoring, co-requisite, summer bridge, AE-ICAPS, foundational mathematics).	The developmental math program offerings are sufficient and meet the needs of students across all programs. There are two pathways for students: 1. STEM, Business and Education Majors Pathway 2. Liberal Arts, Social Sciences and Fine Arts Majors Pathway. The STEM, Business and Education Majors Pathway is designed for students who are pursuing a math or science degree while the Liberal Arts, Social Sciences and Fine Arts Majors Pathway is for students in majors without a heavy math focus. The courses are offered in different formats including online, face to face, self-paced. Placement testing allows for multiple entry points so students start at the level in which they are likely to experience success. Tutoring for specific coursework and study skills is available daily on a walk-in basis at the Sugar Grove and Aurora Downtown campuses and by appointment at the Aurora Fox Valley and Plano campuses. Online tutoring is also available through Smarthinking 24/7 days a week.
INDICATOR 2: COST EFFECTIVENESS	***RESPONSE***
2.1 What are the costs associated with this program?	The direct costs associated with the program include: ● Faculty salary and benefits (full-time and part-time) ● Instructional supplies ● Technology, software and services ● Publications and dues ● Full-time faculty professional development The costs associated with this program is $1,424.51 per load hour which is 29% less than the institutional average of $2002.00 per load hour.
2.2 How is the college paying for this program and its costs (e.g. grants, etc.)?	The college pays for this program and its costs through tuition and fees.
2.3 If most of the costs are offset by grant funding, is there a sustainability plan in place in the absence of an outside funding source? If so, please elaborate.	Not Applicable as the program is supported by institutional funds.
2.4 Based upon this review, what steps are being taken to offer curricula more cost-effectively?	Developmental Education & Academic Support has a much lower program cost per load hour. We are currently practicing cost-effective measures.
2.5 Are there needs for additional resources? If so, what are they?	Additional resources would be beneficial to fund a more effective placement tool, fund more tutoring services, invest in supplemental instruction opportunities, invest in classroom technology, & fund a new summer bridge Math Jam program long term.
INDICATOR 3: QUALITY	***RESPONSE***

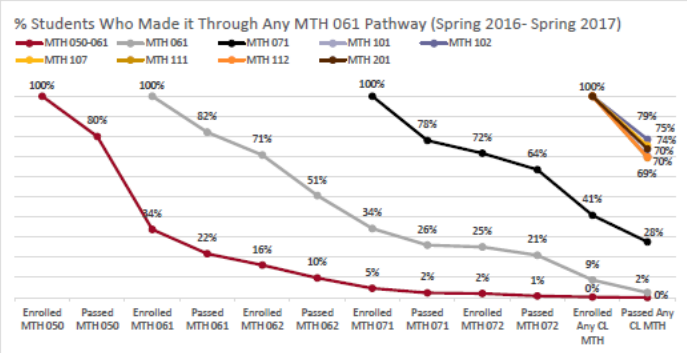
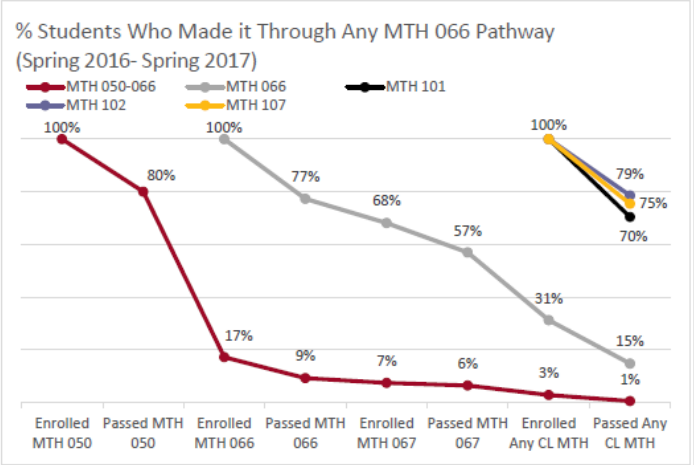
3.1 How is the college working with high schools to reduce remedial needs?	The College has formed several partnerships with local high schools aimed at reducing remediation needs: ● The College offers dual enrollment courses with select area high schools for students to complete developmental math courses prior to attending Waubonsee. ○ In 2013-2015, West Aurora High school offered MTH050, MTH 060 & 070. Somonauk & Batavia offered MTH 060 & MTH 070. ○ In 2015-2017, Somonauk offered MTH 060& 070. ● WCC hosted a College and Career Readiness Summit yearly from 2013-2016. The goal of the summit was to discuss College and Career Readiness with teachers, principals and superintendents from Waubonsee Community College District. It provided area high school teachers and college faculty time to discuss opportunities for improvement. In addition, best practices around college readiness and curriculum alignment were presented. ● In accordance with the Post-Secondary & Workforce Readiness Act, math faculty from Waubonsee and area high schools began conversations regarding creation of a 4th year high school math course. For students who pass with a C or better, this course would guarantee placement into a transfer level math course at any Illinois community college. ○ Waubonsee hosted two informational meetings for high school personnel (October, 2017 & April, 2018) ○ WCC faculty met with the following high schools to discuss the creation of transitional courses: ■ Oswego High School ■ Plano High School ■ West Aurora High School ● Multiple measures will be used for placement into math courses, with a goal to start in fall 2019. The following measures will be used for placement: ○ ACT/SAT Scores ○ ACCUPLACER Scores ○ GED Scores ○ Approved Prior Learning Assessment ○ High School Transitional Math and English Courses ○ Prior College Level Work ● Incoming high school students also have access to the PLATO program, which helps to prepare them for placement testing and therefore reduce the number of incoming students needing remedial courses.

3.2 What is the college doing to develop and implement co-requisite or pathway models to ensure students placing into development education finish the sequence within one academic year?	In 2014, the College implemented two separate pathways for students needing math remediation: STEM, Business and Education Majors Pathway and Liberal Arts, Social Sciences and Fine Arts Majors Pathway. 

	 In addition, the College adopted a new placement test in 2016, ACCUPLACER, which allowed for multiple entry points into STEM pathway courses. In Fall 2018, the first co-requisite math courses will be offered. Students will be able place into MTH 099, Statistics Practicum, and concurrently enroll in MTH107, Basic Statistics. Upon successful completion of MTH 099, students will be able to analyze, interpret, and solve statistical formulas which may involve percent, decimals, ratios and proportions. This option will allow students to complete their developmental education and required college level within one academic year.
3.3 Provide a description of the remedial/developmental sequence. Colleges may attach a graphic representation.	STEM Pathway: 050 Basic Mathematics - 061 Elementary Algebra I - 062 Elementary Algebra II - 071 Intermediate Algebra I - 072 Intermediate Algebra II - 075 Elementary Geometry (if needed) Non-STEM Pathway: 050 Basic Mathematics - 066 Math Literacy I - 067 Math Literacy II – 075 Elementary Geometry (if needed)

3.4 Are there any alternative delivery methods of this program? (online, flexible-scheduling, team-teaching, accelerated, etc.)?	In addition to traditional face-to-face instruction, developmental education courses are offered in the following alternative delivery methods: ● Online: In online courses, most or all of the content is delivered online. There are typically no face-to-face sessions. Students can take MTH 050, MTH061, MTH062, MTH071 & MTH072 in an online format. ● Self-paced: The self-paced format allow students to proceed through the course at their own pace meeting certain deadlines. MTH 050, MTH061, MTH062, MTH071 & MTH072 are offered in an interactive format. ● Acceleration: Courses are offered in 3-week, 4-week, and 8-week formats. MTH 050, MTH 061, and MTH 062, MTH 071, & MTH072 are offered in an accelerated format. MTH 066 & 067 are offered in 8-week format.
3.5 What innovation has been implemented or brought to this program?	Since the last program review, several innovations have been implemented in the developmental math program: ● The number of credits for Basic Math (MTH 050) was reduced from 3 to 2 in order to focus on the most relevant topics. ● Elementary Algebra **(**MTH 060**)** & Intermediate Algebra **(**MTH 070**)** were redesigned from two 4-credit hour courses, into four 2-credit hour courses: Elementary Algebra I (MTH 061), Elementary Algebra II (MTH 062), Intermediate Algebra I (MTH 071) and Intermediate Algebra II (MTH 072). This strategy creates multiple entry points into the curriculum and reduces the time and cost required to complete the developmental sequence. ● The Liberal Arts, Social Sciences and Fine Arts Majors Pathway was created to remove barriers for students pursuing a degree path that does not require college algebra. Two new Math Literacy courses were created, MTH 066 and MTH 067. Courses focus on teaching students to solve realistic problems, develop number sense and improve overall mathematical literacy. Students are taught through a collaborative learning format using technology, including graphing calculators and spreadsheets. ● The Math department has been working on developing a co-requisite course which will provide support to students who missed the cut-off for Basic Statistics by a few points. This course will be offered for the first time in fall 2018. The goal is to reduce time to transition to transfer level math.

3.6 To what extent is the program integrated with other instructional programs and services?	The developmental math program exists to equip students with requisite math skills to participate in college-level courses. As such, during the program/course development process, developmental education faculty are consulted to determine the appropriate math prerequisites. In order to determine student readiness for participation in college level math, developmental faculty partner with transfer faculty to establish cut scores for the different measures used by the College. For example, faculty set cut scores for ACCUPLACER tests as well as ACT/SAT. In addition, as the College moves towards accelerating remediation, developmental education faculty have partnered with transfer faculty colleagues to create a co-requisite course (MTH 099 - Statistics Practicum) that is paired with MTH 107 - Basic Statistics. The developmental math program is supported by the Tutoring Centers which provide learning assistance to all Waubonsee students including placement test preparation.
3.7 Have partnerships been formed since the last review that may increase the quality of the program and its courses? If so, with whom?	Since the last review, Waubonsee hosted a High School Partnership Conference to strengthen collaboration between discipline faculty at each institution. Waubonsee faculty shared expectations and objectives with the high school partners, which created an open line of communication for future planning and course design. Waubonsee faculty also worked with Plano High School to create a MyMathTest that was used for Math 071 and 072 departmental finals. Upon passing these finals, students receive concurrent credit for these courses at Waubonsee. It has since been determined that this is not an effective tool and other methods are being explored, such as a transitional math course. Concurrent credit is currently offered at West Aurora for several developmental education math courses. Concurrent enrollment allows area high school students take college courses. Math faculty attend IMACC every year and follow the current state math discussions between the yearly conferences. Faculty have reviewed and continue to review textbooks for both Pearson and McGraw Hill. Most recently, two faculty, worked on reviewing the newest edition of the Math Literacy textbook. In addition, faculty attend workshops/focus groups to learn about and help work on curriculum.

3.8 How well are completers of remedial/developmental courses doing in related college-level courses?	The graphs below show the student progression through developmental math for the period of Spring 2016-Spring 2017. They indicate that students who started the developmental math sequence in MTH050, in either the STEM or non-STEM pathway, are least likely to succeed in a college level math courses. It is clear, therefore, that students who begin the sequence at higher level are more likely to persist and succeed in college level math courses. To this end, the College is exploring avenues to help students gain entry to developmental courses at a higher level.  

3.9 What professional development or training is offered to instructors and/or staff to ensure quality programming?	Internally, Waubonsee has provided several options for faculty and staff professional development through the Center for Teaching Learning and Technology. Options have included face-to-face training, e-learning, job aids and one-on-one appointments with the Instructional Technologist. Topics have also included Blackboard training and support, instructional design, and classroom management strategies. Several new positions were recently created to focus specifically on faculty development at the college. These include a Dean of Faculty Development, an Assistant Dean for Online Learning and Flexible Delivery and three faculty liaisons to focus on Faculty Development and engagement. During Orientation week, faculty are exposed to a variety of topics related to professional development. For example, during division meetings faculty can share/present innovative ideas or accomplishments. Guest speakers provide an array of professional development topics and opportunities. Usually topics related to technology, student engagement, persistence, success and assessment are presented. During the last two semesters, orientation has focused on the first four week initiative. This strategy is designed to increase retention and ultimately enable larger numbers of students to achieve their educational goals. Faculty are encourage to try new strategies to engage students during the most critical weeks of the semester in terms of retention – the first four weeks. In spring 2018, Dr. Kaatje Kraft presented Motivating Students to learn by creating a classroom community. Full-time faculty also receive professional development funds to attend discipline specific meetings and conferences provided by outside organizations as well as take courses applicable to their field or teaching. Faculty regularly attend conferences and meetings through the National Association for Developmental Education, American Mathematical Association of Two-Year Colleges, and Illinois Mathematics Association of Community Colleges. They have also attended the following workshops/sessions: ● Pearson Math & Statistics Co-Requisite Summit 2018, ● Pearson's Windy City Summits 2018 & 2017, ● McGraw-Hill Math & Science Symposium 2017, ● Pearson's Math Summit 2016 ● McGraw-Hill Math Symposium 2015. Also, all newly hired faculty attend Illinois Community Colleges Faculty Association during their non-tenure time.

LIST ANY BARRIERS ENCOUNTERED WHILE IMPLEMENTING THE PROGRAM.

Placement tools are a barrier in our discipline. Students need to be placed appropriately in order to be successful in our courses and to take an accelerated path through developmental math.

Another barrier in the discipline is the inability to allow late enrollments. With the difficulty placing students appropriately, we have not been able to move students who have been placed in the wrong classes. However, this semester, after seeing an abnormally larger number of students placing into Math 050, we were able to transfer students from Math 050 into Math 061 and 066 after a first day common assessment. We would like to see this process continue and extend into our other courses. A new late enrollment process will be implemented in fall 2018.

For students on the STEM, Business and Education Majors Pathway, MTH 062 is a difficult course. The percentage of students withdrawing and failing is higher than the other STEM developmental courses.

DATA ANALYSIS FOR REMEDIAL MATH

Please complete for each course reviewed as part of the Remedial Math, Cross-Disciplinary Review. Provide the most recent 5 year longitudinal data available.

COURSE TITLE	**MTH 050 Basic Mathematical Skills**				
COURSE DESCRIPTION	This course is a review of the structure and applications of arithmetic. Topics covered include the addition, subtraction, multiplication, and division of decimals and fractions.				
	YEAR 1 2012-13	*YEAR 2 2013-14*	*YEAR 3 2014-15*	*YEAR 4 2015-16*	*YEAR 5 2016-17*
NUMBER OF STUDENTS ENROLLED	646	578	483	329	338
CREDIT HOURS PRODUCED	2079	1851	1554	1050	738
SUCCESS RATE (% C OR BETTER) AT THE END OF THE COURSE, EXCLUDING WITHDRAWALS AND AUDIT STUDENTS	76%	78%	75%	83%	83%

DATA ANALYSIS FOR REMEDIAL MATH

Please complete for each course reviewed as part of the Remedial Math, Cross-Disciplinary Review. Provide the most recent 5 year longitudinal data available.

COURSE TITLE	**MTH 060 Elementary Algebra**				
COURSE DESCRIPTION	This course in beginning algebra covers algebraic expressions, equations, inequalities, problem solving, graphing, polynomials, factoring, rational expressions and rational equations. *Prereq: C or better in MTH050 or placement by assessment.*				
	YEAR 1 2012-13	*YEAR 2 2013-14*	*YEAR 3 2014-15*	*YEAR 4 2015-16*	*YEAR 5 2016-17*
NUMBER OF STUDENTS ENROLLED	1427	1096	92	0	0
CREDIT HOURS PRODUCED	6212	4580	368	0	0

Success Rate (% C or better) at the end of the course, Excluding Withdrawals and Audit students	76%	79%	74%		

Data Analysis for Remedial Math Please complete for each course reviewed as part of the Remedial Math, Cross-Disciplinary Review. Provide the most recent 5 year longitudinal data available.					
Course Title	**MTH 061 Elementary Algebra I**				
Course Description	This course in beginning algebra covers algebraic expressions, equations, inequalities, problem solving, graphing, and polynomials. *Note: This is the first course in a two-course sequence. Prereqs must be met before taking this course.* *Prereq: C or better in MTH050 or placement by assessment.*				
	Year 1 2012-13	*Year 2 2013-14*	*Year 3 2014-15*	*Year 4 2015-16*	*Year 5 2016-17*
Number of Students Enrolled	0	173	760	731	705
Credit Hours Produced	0	366	1610	1574	1534
Success Rate (% C or better) at the end of the course, Excluding Withdrawals and Audit students		75%	82%	81%	77%

Data Analysis for Remedial Math Please complete for each course reviewed as part of the Remedial Math, Cross-Disciplinary Review. Provide the most recent 5 year longitudinal data available.					
Course Title	**MTH 062 Elementary Algebra II**				
Course Description	This continuation of beginning algebra covers polynomials, factoring, rational expressions, and rational equations. *Note: This course is for science, math, business, and education majors. If you are a different major, please see an advisor. This is the second course in a two-course sequence.* *Prereq: C or better in MTH061 or placement by assessment.*				
	Year 1 2012-13	*Year 2 2013-14*	*Year 3 2014-15*	*Year 4 2015-16*	*Year 5 2016-17*
Number of Students Enrolled	0	96	570	585	546
Credit Hours Produced	0	196	1228	1316	1222
Success Rate (% C or better) at the end of the		72%	74%	67%	69%

COURSE, EXCLUDING WITHDRAWALS AND AUDIT STUDENTS					
DATA ANALYSIS FOR REMEDIAL MATH Please complete for each course reviewed as part of the Remedial Math, Cross-Disciplinary Review. Provide the most recent 5 year longitudinal data available.					
COURSE TITLE	**MTH 066 Mathematics Literacy I**				
COURSE DESCRIPTION	This course focuses on solving realistic problems, gaining number sense, and improving mathematical literacy. *Note: This is the first course in a two-course sequence. Prereqs must be met before taking this course. In addition to the textbook, an access code is required for this class.* *Prereq: C or better in MTH050 or placement by assessment.*				
	YEAR 1 2012-13	*YEAR 2 2013-14*	*YEAR 3 2014-15*	*YEAR 4 2015-16*	*YEAR 5 2016-17*
NUMBER OF STUDENTS ENROLLED	0	0	300	348	427
CREDIT HOURS PRODUCED	0	0	933	1095	1386
SUCCESS RATE (% C OR BETTER) AT THE END OF THE COURSE, EXCLUDING WITHDRAWALS AND AUDIT STUDENTS			82%	82%	78%
DATA ANALYSIS FOR REMEDIAL MATH Please complete for each course reviewed as part of the Remedial Math, Cross-Disciplinary Review. Provide the most recent 5 year longitudinal data available.					
COURSE TITLE	**MTH 067 Mathematics Literacy II**				
COURSE DESCRIPTION	This second course in Math Literacy continues to focus on solving realistic problems, further improving number sense and mathematical literacy. *Note: This is the second course in a two-course sequence. Prereqs must be met before taking this course. In addition to the textbook, an access code is required for this class.* *Prereq: C or better in MTH066.*				
	YEAR 1 2012-13	*YEAR 2 2013-14*	*YEAR 3 2014-15*	*YEAR 4 2015-16*	*YEAR 5 2016-17*
NUMBER OF STUDENTS ENROLLED	0	0	219	268	318
CREDIT HOURS PRODUCED	0	0	681	882	1023
SUCCESS RATE (% C OR BETTER) AT THE END OF THE COURSE, EXCLUDING WITHDRAWALS AND AUDIT			76%	80%	82%

STUDENTS					
DATA ANALYSIS FOR REMEDIAL MATH Please complete for each course reviewed as part of the Remedial Math, Cross-Disciplinary Review. Provide the most recent 5 year longitudinal data available.					
COURSE TITLE	**MTH 070 Intermediate Algebra**				
COURSE DESCRIPTION	This course in intermediate algebra covers functions, systems of linear equations, inequalities, exponents and radicals, quadratic equations, and exponential and logarithmic functions. *Prereq: C or better in MTH060 or MTH062 or MTH067; or placement by assessment.*				
	YEAR 1 2012-13	*YEAR 2 2013-14*	*YEAR 3 2014-15*	*YEAR 4 2015-16*	*YEAR 5 2016-17*
NUMBER OF STUDENTS ENROLLED	1140	980	121	0	0
CREDIT HOURS PRODUCED	4832	4212	484	0	0
SUCCESS RATE (% C OR BETTER) AT THE END OF THE COURSE, EXCLUDING WITHDRAWALS AND AUDIT STUDENTS	81%	82%	79%		
DATA ANALYSIS FOR REMEDIAL MATH Please complete for each course reviewed as part of the Remedial Math, Cross-Disciplinary Review. Provide the most recent 5 year longitudinal data available.					
COURSE TITLE	**MTH 071 Intermediate Algebra I**				
COURSE DESCRIPTION	This course in intermediate algebra covers functions, systems of linear equations, inequalities, absolute value equations, and systems of inequalities. *Note: This is the first course in a two-course sequence for science, math, business, and education majors. If you have a different major, you should enroll in MTH066 and MTH067.* *Prereq: C or better in MTH062 or MTH067; or placement by assessment.*				
	YEAR 1 2012-13	*YEAR 2 2013-14*	*YEAR 3 2014-15*	*YEAR 4 2015-16*	*YEAR 5 2016-17*
NUMBER OF STUDENTS ENROLLED	0	104	738	638	573
CREDIT HOURS PRODUCED	0	210	1596	1386	1272
SUCCESS RATE (% C OR BETTER) AT THE END OF THE COURSE, EXCLUDING WITHDRAWALS AND AUDIT		84%	83%	83%	81%

STUDENTS					
DATA ANALYSIS FOR REMEDIAL MATH Please complete for each course reviewed as part of the Remedial Math, Cross-Disciplinary Review. Provide the most recent 5 year longitudinal data available.					
COURSE TITLE	**MTH 072 Intermediate Algebra II**				
COURSE DESCRIPTION	This course in intermediate algebra covers exponents and radicals, quadratic equations, and exponential and logarithmic functions. *Note: This is the second course in a two-course sequence for STEM, business, and education majors. If you have a different major, you should enroll in MTH066 and MTH067. The next choices in math courses are 101, 102, 107, 111, 112, 201. See an advisor to make the best choice for you.* *Prereq: C or better in MTH071; or placement by assessment.*				
	YEAR 1 2012-13	*YEAR 2 2013-14*	*YEAR 3 2014-15*	*YEAR 4 2015-16*	*YEAR 5 2016-17*
NUMBER OF STUDENTS ENROLLED	0	74	544	559	489
CREDIT HOURS PRODUCED	0	148	1144	1208	1058
SUCCESS RATE (% C OR BETTER) AT THE END OF THE COURSE, EXCLUDING WITHDRAWALS AND AUDIT STUDENTS		80%	86%	83%	83%
DATA ANALYSIS FOR REMEDIAL MATH Please complete for each course reviewed as part of the Remedial Math, Cross-Disciplinary Review. Provide the most recent 5 year longitudinal data available.					
COURSE TITLE	**MTH 075 Elementary Geometry**				
COURSE DESCRIPTION	This elementary geometry course covers the language of geometry, similarity, congruence, properties of points, lines, triangles, rectangles, parallelograms, squares, trapezoids, other quadrilaterals, circles, volumes, surface areas, spheres, cylinders, cones and other solids. *Prereq: C or better in MTH060 or MTH062 or MTH067; or placement by assessment.*				
	YEAR 1 2012-13	*YEAR 2 2013-14*	*YEAR 3 2014-15*	*YEAR 4 2015-16*	*YEAR 5 2016-17*
NUMBER OF STUDENTS ENROLLED	369	383	317	314	124
CREDIT HOURS PRODUCED	1179	1236	1023	1008	399
SUCCESS RATE (% C OR BETTER) AT THE END OF THE COURSE, EXCLUDING	84%	85%	89%	90%	83%

WITHDRAWALS AND AUDIT STUDENTS					

REVIEW RESULTS	
Rationale Provide a brief summary of the review findings and a rationale for any future modifications.	The data suggests that: ● Developmental math enrollments peaked in 2014-2015 to 4,144 students, then saw a slow decline in 2015-2016 of 372 students and again of 252 students in 2016-2017 academic year. ● Credit hours generated from developmental education courses declined significantly (40%) from FY 2013-2017. This was due to redesign of the developmental education curriculum. ● The success rates of individual courses is relatively high. However, as students travel the developmental education to college level pipeline, success rates decline, especially when students start in MTH 050.
Intended Action Steps Please detail action steps to be completed in the future based on this review with a timeline and/or anticipated dates.	Fall 2018 ● Transitional Math Courses - Support: Work with the area high schools on an as needed basis to support the creation of their courses. ● Co-requisite Remediation - Pilot: The Math department has been working on developing a co-requisite course which will provide support to students who missed the cut-off for Basic Statistics by a few points. This course will be offered for the first time in fall 2018. The goal is to reduce time to transition to transfer level math. ● Placement Strategy - Refine: The Placement Advisory Committee will review current practices related to student placement including the use of alternative products and cut-scores revisions. Spring 2019 ● Bridge Programs - Launch: As one approach to reducing the number of students entering remediation, the College is implementing bridge programs. Students will have an opportunity to refresh math skills prior to placement testing or retesting. Fall 2019 ● Transitional Math Courses - Launch: will be used for placement ● Multiple Measures - Launch: will be used for placement Fall 2020: ● Transitional math courses will be fully implemented at all district high schools and will be used for placement.

Student and Academic Support Services The ICCB Program Review requires each college to submit a statement of the review of student and academic support services that the college completed during the year. A completed and comprehensive review will likely be between **4 – 8 pages in length**.	
COLLEGE NAME:	Waubonsee Community College
FISCAL YEAR IN REVIEW:	2013 - 2018
REVIEW AREA:	Career Development Center
Program Summary Please provide a brief summary of the function of the program.	The Career Development Center (CDC) provides a wide range of free services offered to students and college district members seeking full or part-time employment, as well as, employers recruiting for quality candidates. Resources available to students, employers and job seekers include an online job resource tool www.waubonseecareernetwork.com for posting and applying for positions. Students and community members can post their resume or career portfolio for a career advisor to review. Three career fairs are offered annually hosted at 3 different campuses. Career advising appointments are offered at each campus and include both walk-in and scheduling options. Experiential learning opportunities for students include internships and study abroad programs. The CDC assists with locating internships and obtaining academic credit for the internship, should the student decide to do so. The same is true for those students choosing to enroll in a study abroad program.

Prior Review Update Describe any quality improvements or modifications made since the last review period.	Since the last program review, the CDC has undergone notable modifications and implemented many quality improvements: **1.** In 2015, the center underwent a re-branding initiative changing the name from Career Services to the Career Development Center (CDC) to align with its new mission of promoting and supporting the career development lifespan of the student. 2. A three-year strategic plan for the CDC, completed in January of 2017, outlines business commitments to four groups of stakeholders: Students, Employers, Community Partners/Members and Alumni. Each business commitment and respective outcome goal supports Waubonsee's five core values of Quality, Value, Innovation, Service and Accessibility, and the college's five Transformational Goals of Prepare Learners, Provide Access, Design Opportunities, Strengthen Connections, and Expand Knowledge. 3. As part of Waubonsee's three-year Transformational Plan, the CDC launched an alumni mentoring program to strengthen connections between successful alumni and current students. The pilot mentoring program kicked-off in February 2018 with the implementation of Waubonsee Connect, a mentoring platform powered by PeopleGrove. In April 2018, an email invite to join Waubonsee Connect was sent to over 13,000 alumni resulting in 125 new users in the platform. 4. A complete revision of the CDC's web pages finished up in February 2018. Content promotes the new mission of the department, along with the addition of a resources section where students and community members can access resume and other job search related materials 24/7. Widgets added to the page allow for easy viewing of upcoming career events and ability to feature selected videos from a new subscription-based service, Candid Career Videos. 5. New technology tools are now in place to serve the diverse career development needs of students. Career Beam, purchased in 2015, is a full service career portal containing resources and self-directed modules that guides users through the career development process. Candid Career Videos was added to our suite of tools in 2016 providing students and community members' access to thousands of career information videos and interviews of working professionals in a wide range of industries and occupations. 6. To measure the quality of services delivered, the CDC implemented a survey to assess the experience of engaging with the office and the advising staff. Results of the survey show on a scale of 1-5, with 5 being the highest rating, that we are meeting our goal of providing a quality service with an overall rating for the past year of 4.8. (See Figure 1) 7. The CDC hosts two major career fair events each year and one targeted career fair. A new focus on effectiveness and outcomes of these events took shape as measures were put into place such as implementing advance registration for attendees, shifting majority of marketing efforts to social media platforms, including academic programs in the planning process, and inviting faculty to bring their classes and/or assign attendance as extra-credit. To increase

Prior Review Update Describe any quality improvements or modifications made since the last review period.	student participation in the career fairs, changes to the day and timing of the events were made for better alignment with student's schedules. (See Figures 2-5) 8. In the 2016-2017 academic year, we began an On Campus Recruiting (OCR) program to connect employers with students at three campuses. Employer tables are set up in high-traffic areas to highlight their open positions and company culture. Each event is limited to five employers maximum. OCR event times take place during peck class hours in an effort to get maximum student participation. Healthcare employers participate at our Aurora Fox Valley Campus where Waubonsee's health professions programs reside and all other employers participate at the Sugar Grove Campus and Aurora Downtown Campus. (See Figure 6) 9. Beginning in spring 2016, the CDC intensified outreach to faculty resulting in a significant increase in classroom presentations over the next two academic years. Presentations ranged from fifteen minute overviews of the department to mock interview sessions, with most focusing on the topics of resume writing and effective job search techniques. In Academic Year 2017, the CDC gave 111 classroom presentations that reached 1,919 students. To date, the CDC has presented to 269 classrooms, reaching 4,521 students since September 2015. (See Figures 7, 8) 10. In collaboration with Financial Aid, Bursar, Registration and Records, Academic Deans and Instructions Services Manager established a revised workflow for assisting students from application to program completion for study abroad programs with the Illinois Consortium of International Studies and Program (ICISP). The processes and documents developed improved efficiency and clarity. New processes for course articulation provide future students with more information on how study abroad courses may appear on their transcripts. Additionally, we adapted the workflow, processes, and documents, to support students participating in our newly created non-ICISP study abroad program. 11. Since many of the procedures and processes underwent significant changes in the past three years, the CDC created a standard operating procedure (SOP) manual to standardize office procedures and policies, simplify new employee onboarding, and to document changes in technology, staff roles, and internal/external partners. The SOP is accessible to and editable by all Career Development Center staff, allowing for ongoing revision.

What are the identified or potential weaknesses of the program?	**1. Department remains more Transactional versus Integrated** While the CDC continues to be involved with processes related to experiential learning (internships, study abroad, job shadowing), integrating these experiences into career educational programming would not only increase the number of students actively participating in career learning, but also positively impact retention. While the CDC has seen a slight drop in for-credit, non-clinical internships, there are concerns about this continuing trend. (See Figures 13 – 15) Career readiness continues to be a primary need from employers as they look to replenish and build talent pipelines. Participation in an internship is still the best avenue for students to apply classroom learning to the marketplace and build their career readiness competencies. Career centers across the globe are now seeking ways to scale their services and work across ecosystems in order to improve access to career education and create integrated models of career learning. Data collected over the past three years shows a strong correlation between classroom presentations and the number of students who seek out assistance with CDC. (See Figures 7,8) Based upon this data and industry trends, the key to students successfully engaging in their career development, will rely upon how integrated career development is within the academic programs. **2. Current career-search technology offering is ineffective** New technology for career centers has arrived on the scene, improving data management and student engagement with the use of Artificial Intelligence (AI), creating a better experience for students, employers and career center staff. These career management systems, more technologically advanced and attuned to the career industry shifts, have moved away from a transactional job board to a comprehensive integrated solution. The CDC continues to provide College Central Network (CCN) for employers to post job and internship opportunities for students and community. Historically, CCN has been several years behind in its technology features and interface. For example, in the last two years CCN made it possible for a student to upload more than one resume in the platform, whereas this has been a standard feature in other systems going back 10 years. Waubonsee student usage of this platform is low due to its dated interface, low interest in jobs posted and perception that it is of little value to their career need despite the CDC's efforts to promote the tool via all our marketing channels and student interactions. (See Figures 13 – 15) Increasingly, we are hearing from employers that their job postings are not yielding any interested candidates. Instead, employers are asking to by-pass the job board and be directly connected to faculty. With some Career and Technology Education programs, we pro-actively facilitate the employer-instructor connection as it leads to better outcomes (internships and job placement) for both students and employers.

What are the program's strengths?	The CDC continues to build collaborative relationships across the college in an effort to scale knowledge and services, and improve student engagement and outcomes. Success in this area has resulted from the following efforts: • **Collaboration with internal and external partners.** These efforts continue to expand. New relationships from this past year yielded a successful internship and part-time jobs fair with Financial Aid, a train-the-trainer series with a local vocational high school and co-hosting with the Health Professions and Public Service academic department, the first Emergency Management Services career fair. • **Evidence-based planning.** The CDC has boosted the collection and reporting of data to inform decision-making in terms of: how to sustain effectiveness of career fairs, quality of our career advising, resource usage and value, how students and community members hear about the department, and web site analytics. • **Improved curricular integration.** Our goal of being more integrated into the curriculum is slowly progressing. We do have repeated invitations to present in classrooms, and are now participating in program reviews and program of study committees. • **Strong online presence.** Utilization of resources and tools remains strong. Monthly traffic to our web pages has consistently reported an impressive 'Average Time on Page' of 1 minute and 25 seconds. Since the release of the new website traffic has more than doubled from an average of 900 page views to well over 2500 page views. • **Internal and External Visibility.** With the support of leadership and Marketing & Communications, the department has benefitted from an increase in visibility. • **Robust staff talent development**. CDC staff continues to be active with key organizations staying current on trends in hiring, job searching, and career development interventions. Webinars and participation in-person conferences with Academic Impressions, National and Midwest Association of Colleges and Employers, National Career Development Association and others. • **Quality programs and services.** As mentioned in the improvements section, the overall quality rating of the department for the past year is 4.8/5.0. Survey outcomes from career fairs yield a consistent 3.5/4.0 average for attendee positive experience, and a 3.7/4.0 from employers for a positive experience. Employers who return each year to our career fair events is 50%.

Rationale
Detail all major findings resulting from the current review.

QUALITY SURVEY RESULTS

Students complete this survey to evaluate their experience with the CDC after meeting with an advisor

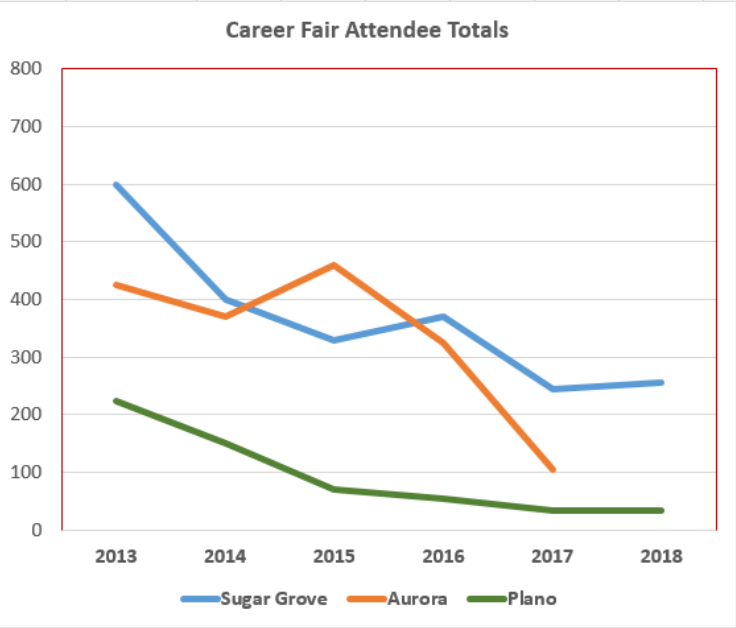
Figure 1

	Overall CDC	
	N	Mean
The career advsor I met with:		
effectively answered my questions.	158	4.89
understood my specific career need(s).	157	4.84
provided information that was easy to understand.	158	4.91
encouraged me to reflect on my previous experiences as these relate to my current situation.	157	4.80
increased my belief in my ability to make career-related decisions.	156	4.76

CAREER FAIRS

Over the past 5 years, attendance at career fairs has been steadily declining. Some of this can be attributed to an improving economy; however, employer participation remains steady at our two major fairs.

Figure 2



Career Fair Attendees By Type

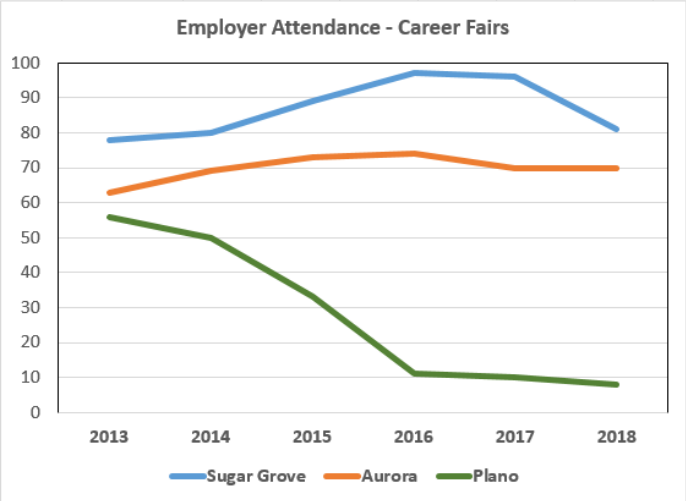
Figure 3

	Student	Community	Alumni
Fall 2017	31	65	10
Spring 2018	112	124	22
Plano 2018*	2	28	5
Fall 2016	75	220	30
Spring 2017	86	144	15
Plano 2017	2	25	5
Fall 2015	105	305	40
Spring 2016	191	150	34
Plano 2016	0	55	0

Rationale
Detail all major findings resulting from the current review.

Employer Attendance

Figure 4



Career Fair Outcomes

***Reported by employers who responded to an email survey 30 and 60 days out from event.**

Figure 5

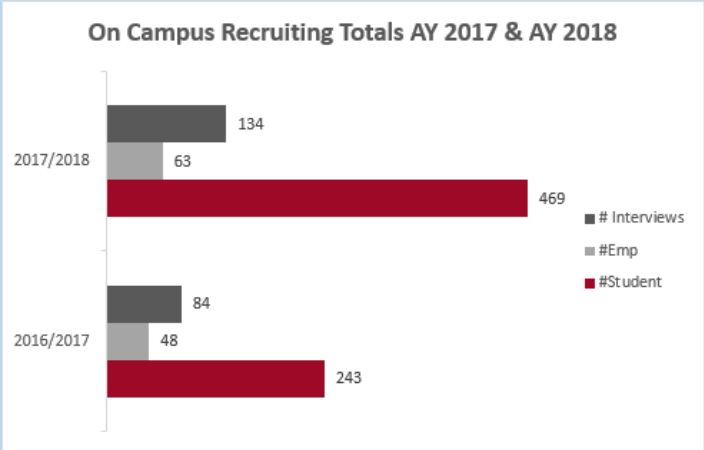
	Interviews	Hires
Spring 2018	20	6
Fall 2017	11	4
Spring 2017	18	10
Fall 2016	29	7

Rationale
Detail all major findings resulting from the current review.

ON CAMPUS RECRUITING

The CDC hosts employer tables at 3 campuses 5-6 times throughout the academic year.

Figure 6



CLASSROOM PRESENTATIONS

Figure 7

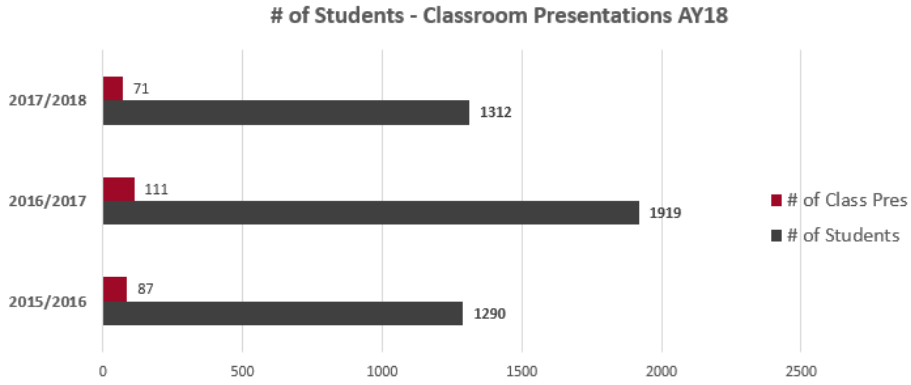
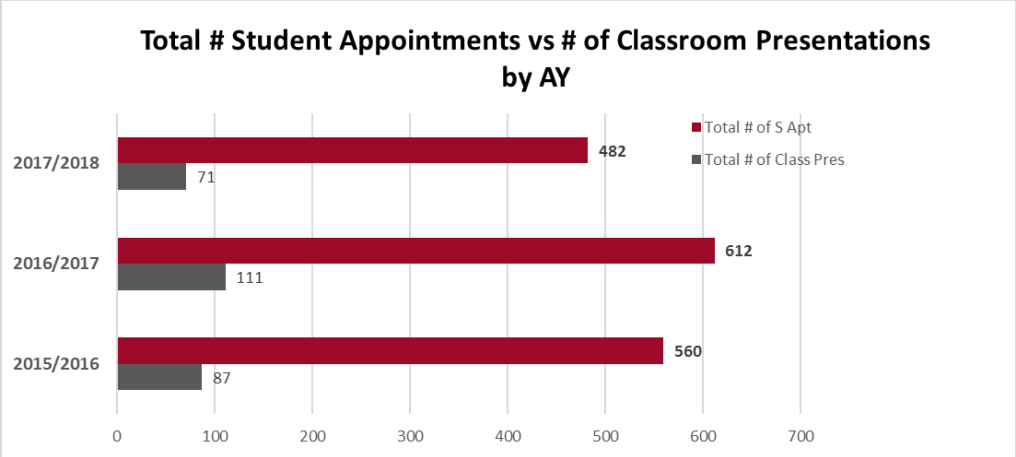


Figure 8



Rationale
Detail all major findings resulting from the current review.

INTERNSHIPS (Credit, non-Clinical)

Figure 9

# of students enrolled in ITS, ABR, ACC 297-299 courses

Academic Year	# of Students
2013-2014	53
2014-2015	54
2015-2016	43
2016-2017	45
2017 - 2018	34*

*As of 6/15/2018. Registration closes 7/2/2018

STUDY ABROAD PARTICIPATION

Figure 10

# of students enrolled in section 700-702 courses marked with STA in course title

Academic Year	# of Students
2013-2014	14
2014-2015	22
2015-2016	12
2016-2017	6
2017 - 2018	7

Rationale
Detail all major findings resulting from the current review.

CDC Appointment Trends

Figure 11

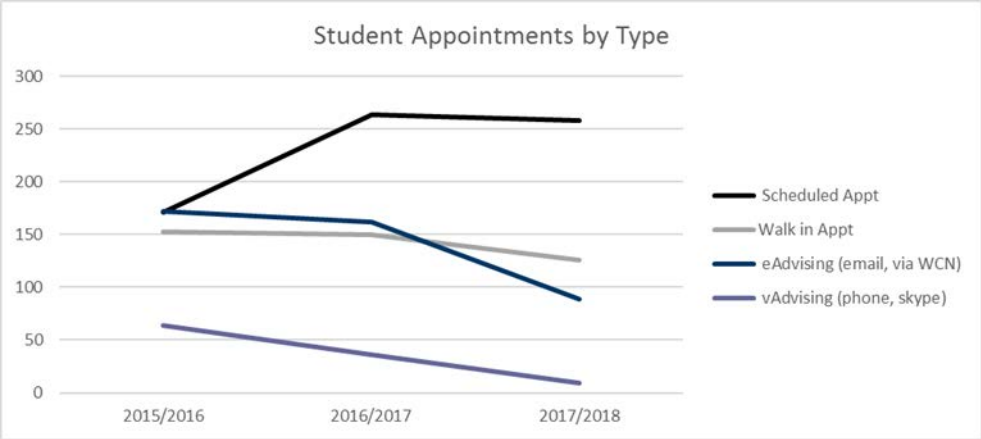
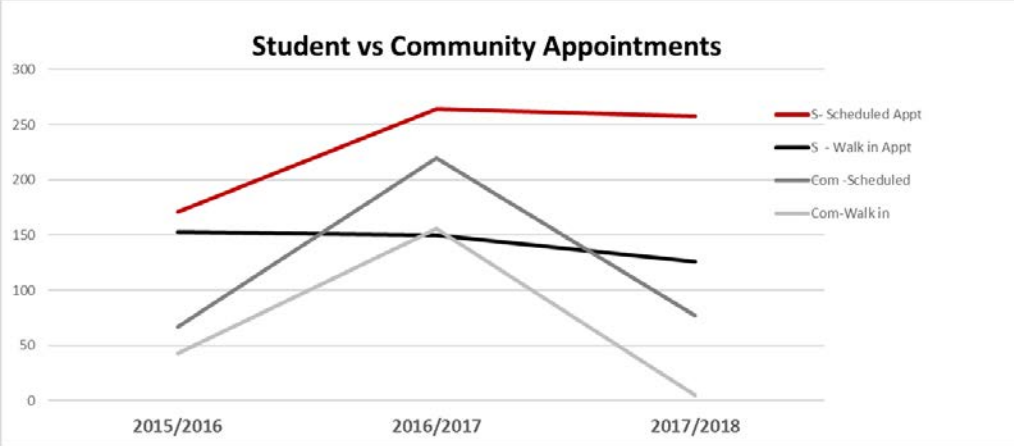


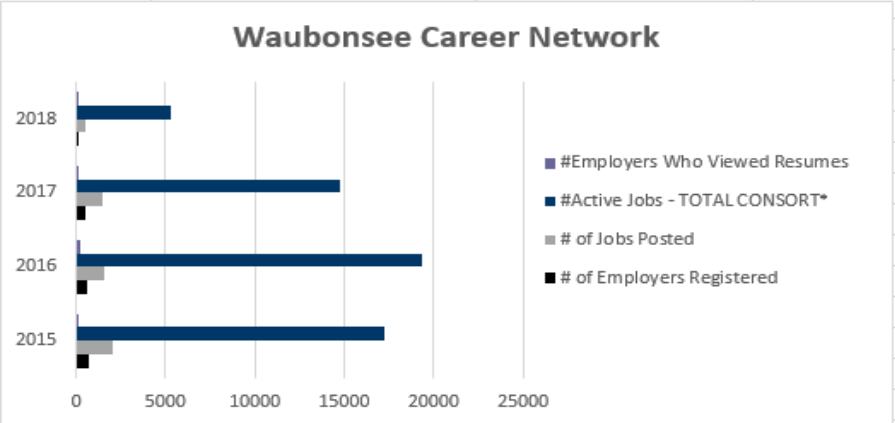
Figure 12



Waubonsee Career Network (College Central Network)

Online job board and resource tool

Figure 13



*Waubonsee is part of CCJOBNET, a 14-member Illinois community college consortium that offers a central job posting site, in addition to our own separate online job board.

Rationale
Detail all major findings resulting from the current review.

Waubonsee Career Network

Student Utilization Report – Job Search Figure 14

Student Job Search Activity

Between 8/1/2015 and 5/31/2018

Submissions are the total number of times that students have submitted their résumés and/or portfolios to job postings online.

Referrals are the total number of student résumés and/or portfolios that were referred to employers by your office. **Note**: this may be more than the total number of student résumés and portfolios in the database.

Résumé Reviews are the total number of reviews of student résumés performed online by employers. **Note**: this may be more than the total number of résumés in the database.

Portfolio Reviews are the total number of reviews of student portfolios performed online by employers. **Note**: this may be more than the total number of portfolios in the database.

You currently have **144** résumés and **15** portfolios in your database, uploaded by **3838** students.

Submissions	**20**
Referrals	**0**
Résumé Reviews	**1643**
Portfolio Reviews	**34**

Student Utilization Report – Job Applications Figure 15

Student Submissions to Job Postings

Search Criteria	
Contact	Employer
Company Name	
Job Type	Any Job Type
Submission Date	Between 8/1/2015 and 5/31/2018

Click the **Responses** to view the names of students interested in each job.

Click the **Job ID** to view the job details.

Job ID	Company Name	Job Title	Responses
4340837	ALDI Inc.	Corporate Buying Marketing Assistant	2
4340811	ALDI Inc.	Corporate Buying Assistant	1
4561492	AMI Communications	Entry Level Computer/Network Support	1
5088489	Coldwell Banker	Office Assistant	1
4957424	Forest Preserve District of Kane County	Human Resources/Volunteer Services Assistant	1
4721822	Gripple Incorporated	Technical Sales Assistant/Engineering Clerk	1
4721844	Gripple Incorporated	Training Website Administrator	1
4237283	InSite Real Estate, LLC	CAD Technician	1
5508028	Laub Construction. Inc.	Project Engineer	1
5074509	M E Computer Svc	Administrative Assistant	1
4734978	Solution Partners, Inc.	Entry-Level/Junior Technical Recruiter	1
4317274	The Straits Company, Inc./Vesco Reprographic	Reprographic Technician	1

Intended Action Steps Please detail action steps to be completed in the future based on this review with a timeline and/or anticipated dates.	Continue building partnerships with academic programs to customize career fair needs of students and improve hiring outcomes. • Partner with Adult Education and Youth Service Program for fall 2018 Career Fair. Invite employers who offer internships, job shadowing or employment opportunities for this target population. Evaluate technology tools coming to market that meets the career management needs of the CDC, Waubonsee students and employers in terms of recruiting, reporting and analytics, career education, job search preparation and management, experiential learning and event management. • Replace/upgrade career management system (job board) by AY2020 Refine our brand from being a transactional department to a systemic substructure that supports the entire student experience. During AY2019, the CDC will: • Explore using new tools that students and faculty can access to increase their career education knowledge. Examples include using a media platform to create "web shops" on resumes, job search, branding that can be posted to our web page, uploaded to eLearning platforms, etc. We will continue to offer extra credit assignments or be a "substitute" for any missed/canceled classes. • Actively engage in program of study and program review committees to integrate career education into the curriculum through ongoing partnerships with academic and program deans. • Begin implementing a case management-type model to build closer ties with our Student Success Program and the counseling and advising team. Employing this model will contribute to efforts around retention and success. Assessment of data analytics on student and employer engagement to revise or improve service delivery or resource needs that align with the department, division and college goals. • Ongoing with monthly reports to Dean of Student Success and Retention, and a yearly summary to highlight strengths and identify areas for improvement.

Student and Academic Support Services

The ICCB Program Review requires each college to submit a statement of the review of student and academic support services that the college completed during the year. A completed and comprehensive review will likely be between **4 – 8 pages in length**.

COLLEGE NAME:	Waubonsee Community College
FISCAL YEAR IN REVIEW:	2017-2018
REVIEW AREA:	Academic Support-Tutoring
Program Summary Please provide a brief summary of the function of the program.	The Tutoring Centers are available to assist Waubonsee students in accomplishing their educational goals. The primary objective is to provide tutoring and other learning assistance to enhance student academic performance and/or workforce preparation. Tutoring Centers are open to all students who need assistance and provide the following services: • Tutoring for specific coursework and study skills is available daily on a walk-in basis at the Sugar Grove and Aurora Downtown campuses and by appointment at the Aurora Fox Valley and Plano campuses. Online tutoring is also available through Smarthinking 24/7 days a week. • The Supplemental Instruction Program was created in 2014 to support students taking historically difficult courses, defined as those with a high rate of D or F grades and withdrawals. The program provides regularly scheduled out-of-class peer facilitated review sessions. Since 2014, Supplemental Instruction has been offered in English, Anatomy and Physiology, Microbiology, Phlebotomy, Biology. • Academic Coaching is a one-on-one process of helping students examine academic concerns and perceived barriers to success. Together with a coach, students can improve their skills in many areas, including time management, goal setting, and test preparation. Coaches are available 5 days a week at the Sugar Grove and Downtown Aurora campus. Students may request an appointment or walk-in for assistance. The academic coaches also facilitate study strategies workshops to classes by invitation. • Test preparation assistance is available to students interested in boosting their scores on the Accuplacer Placement exam. Students use an online program called Plato to assess their skills in math, reading and writing. Then, they are assigned learning modules based on deficit areas. For example, if the math assessment revealed a deficit in fractions, the student would be assigned a module on fractions to complete.

	In addition to offering traditional services, Tutoring Centers staff collaborate with faculty on assignments that have a tutoring component. • Some biology 100 instructors require students to meet with an academic coach to discuss learning skills prior to the first test. In addition, they require lab reports to be reviewed by a writing tutor prior to submission. • A number of English instructors also require review of papers in the writing stage as well as before submission. • Review is also required for chemistry and criminal justice papers.
Prior Review Update Describe any quality improvements or modifications made since the last review period.	Since the last program review, the following changes and developments have occurred: • 2013 o The Tutoring Center at our main campus (Sugar Grove) was remodeled and enlarged and all tutoring is now held in one location. ▪ The center now has eleven tables with four chairs per table for student/tutor sessions and eleven computer stations along the walls. There are also four chairs with tablets. ▪ A separate room within the main tutoring center holds models for biology and anatomy & physiology including, skeletons, bones, and charts. Students use the models individually and in groups with or without tutor assistance. ▪ Four glass front cabinets hold additional models, microscopes, slides, and textbooks. ▪ Three large whiteboards, two on walls, and one moveable are also available. o The hours of face-to-face tutoring increased at Sugar Grove campus to 7 days a week, and two evenings. Aurora is open 5 days a week and two evenings. o Academic Coaching Program began. • 2014 o Supplemental Instruction was offered for English; anatomy and physiology; microbiology, phlebotomy, biology. • 2015 o Online tutoring via Smarthinking was made available to all students. • 2016 o Tutortrac, a new student tracking system, allows Waubonsee to better track student attendance, subjects being tutored, length of the tutoring sessions and number of visits. It also provides a place for students to evaluate the tutor and the session. o Tutors started evaluating each tutoring session. They complete a report on each student's tutoring session which includes ratings in the categories of planning, questioning, conceptual focus, and active learning. These reports are available for tutors to refer to when a student returns to the center for assistance, resulting in consistency in the student's tutoring experience.

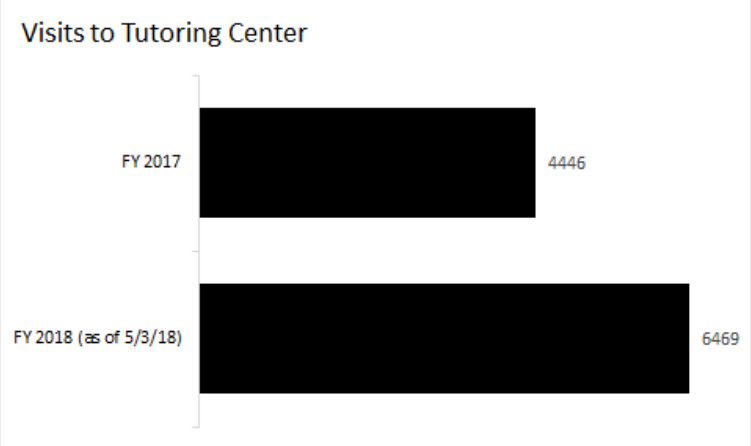
What are the identified or potential weaknesses of the program?	Tutoring Centers offer a wide range of support to address the diverse learning needs of Waubonsee students. However, concerns include: • Use of Services: Currently, only 8.15% of the Waubonsee student population utilize the assistance provided through the Tutoring Centers. Therefore, an opportunity exists to increase the number of students utilizing academic assistance from a wider range of courses. • Engaging Faculty: Currently, there are a few faculty who promote tutoring services by inviting tutors to speak with their students. An opportunity exists to expand the number of faculty promoting services available through the Tutoring Centers. • Service Delivery: The number of Waubonsee students taking online courses has increased by 3.8% over the past two years. Also, the college is exploring different approaches to delivery of instruction through the Educational Affairs Plan. An opportunity exists to identify and explore effective practices for academic support service delivery for online, CTE and non-traditional students.
What are the program's strengths?	Waubonsee Tutoring Centers were certified through the College Reading and Learning Association's (CRLA) International Tutor Training Program Certification at Level I in 2014 and Level II Advanced Tutor Training Program in 2016. The benefits for certification are present for both tutors and the students using the Tutoring Centers. Students receive help from tutors that are highly trained in the delivery of services. CRLA certification benefits tutors by boosting confidence in tutoring skills, and increasing their professional profile. It also augments program credibility for administrators and institutions. • Hours of Operation: The main Tutoring Center on the main campus in Sugar Grove is conveniently open 7 days a week and two evenings. Aurora is open 5 days a week and two evenings. Students have access to online tutoring 24/7 through Smarthinking. Appointments can be made for any location, including Plano and Fox Valley. • Diverse professional background of tutors: Tutors include professional tutors, paraprofessional tutors, and peer tutors, resulting in a variety of tutoring techniques and multiple subjects being available for tutoring including math, English, accounting, economics, sciences, physics, Microsoft Office, Spanish, writing.

Rationale
Detail all major findings resulting from the current review.

% Semester Population Served by Tutoring Centers Each Semester			
	Unduplicated Tutoring Center Students	Total Unduplicated Enrolled Credit	% Unduplicated Population
FY 2017	1,178	14,995	7.9%
Summer 2016	7	5,051	0.1%
Fall 2016	714	9,617	7.4%
Spring 2017	683	9,128	7.5%
FY 2018	1,211	14,422	8.4%
Summer 2017	101	5,003	2.0%
Fall 2017	744	9,054	8.2%
Spring 2018 (as of 5/3/18)	637	8,802	7.2%
Total	**2,074**	**22,494**	**12.8%**

Table 1: Percentage of the population served by the Tutoring Center

Table 1 reflects the percentage of students served FY18. The tutoring program serves on average, about 8.15% of the student population.



Graph 1: Visits to the Tutoring Center

Graph 1 indicates yearly visits to the Tutoring Centers for FY17 and FY18. The data reflects an increase of 2,023 visits, which is a 46% increase. This may be due to faculty requiring tutoring in certain courses. In addition, Tutortrac was implemented in FY17 and as with the implementation of any new program, there was a period of time needing to solidify processes which resulted in inconsistent data collection.

Subject & Course	Total Visits	% of Total Visits
ENG101	1,432	13.1%
BIO120	1,084	9.9%
ENG102	736	6.7%
MTH107	548	5.0%
MTH131	340	3.1%
CHM121	328	3.0%
MTH071	303	2.8%
MTH132	284	2.6%
MTH072	279	2.6%
ENG070	261	2.4%
All Other Classes	4,233	38.8%
All Other Dev Classes	1,087	10.0%
Grand Total	10,915	100.0%

Table 2: Courses with the most Tutoring Center visits

Table 2 shows the number of visits to Tutoring Centers by class and term for FY 2016 and FY 2017 for the top 10 courses with the most visits. Students in developmental classes use the Tutoring Center more than students in credit bearing courses. Developmental classes are highlighted in gold and account for 17.7% of the Tutoring Center volume overall. Enrollment in developmental classes represents 9.13% of total credit enrollments in FY 2016 and FY 2017 together.

Intended Action Steps
Please detail action steps to be completed in the future based on this review with a timeline and/or anticipated dates.

1. **Increase the number of students serviced by the Tutoring Centers (SG, DWNT, Fox Valley, and Plano) by 2%.** This goal will be measured through accurate data collection and monthly reports from all centers. The Academic Support Manager will continue to work with faculty and tutors to develop proactive institutional initiatives that measurably affect student preparedness and success.

2. **Increase visibility of tutoring services at all campuses using marketing techniques, classroom visits, participation in special events such as orientation, WCC open house(s) and first look.** This goal will be measured through accurate data collection of all efforts.

3. **Expand Supplemental Instruction offering for historically difficult courses by 2% by fall 2019.** The Academic Support Manager will continue to work with faculty and Supplemental instruction leaders to offer SI sessions for historically difficult courses.