

**Los Medanos College**  
**Program Review Data for**  
**Automotive Technology**

Prepared by the Office of Institutional Research

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Background

This report provides the department with three-year trends on indicators on the following areas:

- Enrollment
- Productivity
- Student Success

For Vocational Education programs, data on VTEA core indicators are provided.

I. Enrollment: This section provides a three-year trend on student enrollment by headcount as of first census. Because our demographic make up is rapidly changing, figures by ethnicity are also provided.

II. Productivity: In this section, three-year trends are provided for: FTEF/FTES, FTES, Part-time FTEF, full-time FTEF, and full-time Staff. For most measures, college figures are provided for comparison purposes.

III. Student Success. This section consists of: Retention Rates, Success rates, number of students with declared major who completed 18 units or more, and number of degrees and certificates awarded. In this section, statistics by ethnicity are also provided.

**Note: ALL DATA is for the academic year (Fall and Spring only).**

Definitions for each measure are provided in the footnotes.

Data Sources: The two main sources of information are: 1. DataTel and the Research Data Warehouse. Productivity figures were provided by the Business Office.

## Statistics

**HEADCOUNT ENROLLMENT (Unduplicated at First Census):** Student headcount in Automotive Technology has increased from 214 in 2002-2003 to 316 in 2004-2005, an increase of 102 students. When examining student enrollment by ethnicity, it is observed that Filipinos increased by 5% and Hispanics increased by 6% in the last three years. Asians decreased by 2%.

The program's headcount ethnic composition generally reflects the ethnic composition of the college's headcount.

### Headcount Enrollment: Automotive Technology

	2002-2003		2003-2004		2004-2005		3-Year Change	
	Program	College	Program	College	Program	College	Program	College
	<b>N=214</b>	N=12946	<b>N=269</b>	N=11527	<b>N=316</b>	N=12808	<b>+102</b>	+1606
							<b>48%</b>	<b>11%</b>
<b>Asian</b>	<b>9%</b>	5%	<b>8%</b>	6%	<b>7%</b>	6%	<b>-2%</b>	1%
<b>African American (non-Hispanic)</b>	<b>7%</b>	13%	<b>9%</b>	13%	<b>7%</b>	14%	<b>0%</b>	1%
<b>Filipino</b>	<b>5%</b>	6%	<b>8%</b>	6%	<b>10%</b>	6%	<b>5%</b>	0%
<b>Hispanic</b>	<b>20%</b>	21%	<b>24%</b>	23%	<b>26%</b>	24%	<b>6%</b>	3%
<b>American Indian/Alaskan Native</b>	<b>1%</b>	1%	<b>1%</b>	1%	<b>1%</b>	1%	<b>0%</b>	0%
<b>Other Non-White</b>	<b>6%</b>	3%	<b>4%</b>	3%	<b>2%</b>	2%	<b>-4%</b>	-1%
<b>Pacific Islander</b>	<b>1%</b>	1%	<b>0%</b>	1%	<b>1%</b>	1%	<b>0%</b>	0%
<b>White non-Hispanic</b>	<b>44%</b>	44%	<b>39%</b>	43%	<b>44%</b>	43%	<b>0%</b>	-1%
<b>Unknown</b>	<b>7%</b>	7%	<b>7%</b>	5%	<b>2%</b>	3%	<b>-5%</b>	-4%
<b>All Students</b>	<b>100%</b>	100%	<b>100%</b>	100%	<b>100%</b>	100%	<b>-</b>	<b>-</b>

NOTE: Percentages may not add up to 100% due to rounding.

**SEATCOUNT ENROLLMENT (Duplicated at Census):** Seatcount enrollment for Automotive Technology increased from 310 in 2002-2003 to 544 in 2004-2005, an increase of 234 students. When examined by ethnicity, seatcount enrollment increased for Filipinos by 3%, for Hispanics by 6% and for Whites by 3%. Seatcount enrollment decreased for Asians by 2% and for African-Americans by 1%.

### Seatcount Enrollment: Automotive Technology

	2002-2003		2003-2004		2004-2005		3-Year Change	
	Program	College	Program	College	Program	College	Program	College
	N=310	N=43127	N=472	N=40792	N=544	N=42549	+234	-578
							+75%	-1%
<b>Asian</b>	<b>11%</b>	5%	<b>10%</b>	6%	<b>9%</b>	6%	<b>-2%</b>	1%
<b>African American (non-Hispanic)</b>	<b>9%</b>	14%	<b>7%</b>	14%	<b>8%</b>	15%	<b>-1%</b>	1%
<b>Filipino</b>	<b>5%</b>	6%	<b>11%</b>	6%	<b>8%</b>	6%	<b>3%</b>	0%
<b>Hispanic</b>	<b>20%</b>	20%	<b>22%</b>	22%	<b>26%</b>	24%	<b>6%</b>	4%
<b>American Indian/Alaskan Native</b>	<b>1%</b>	1%	<b>1%</b>	1%	<b>2%</b>	1%	<b>1%</b>	0%
<b>Other Non-White</b>	<b>6%</b>	3%	<b>3%</b>	3%	<b>2%</b>	3%	<b>-4%</b>	0%
<b>Pacific Islander</b>	<b>1%</b>	1%	<b>0%</b>	1%	<b>1%</b>	1%	<b>0%</b>	0%
<b>White non-Hispanic</b>	<b>41%</b>	43%	<b>39%</b>	43%	<b>44%</b>	43%	<b>3%</b>	0%
<b>Unknown</b>	<b>7%</b>	7%	<b>6%</b>	5%	<b>1%</b>	2%	<b>-6%</b>	-5%
<b>All Students</b>	<b>100%</b>	100%	<b>100%</b>	100%	<b>100%</b>	100%	<b>-</b>	<b>-</b>

NOTE: Percentages may not add up to 100% due to rounding.

**PRODUCTIVITY:** Productivity (FTES/FTEF) for LMC's Automotive Technology program increased from 21.6 in 2002-2003 to 23.4 in 2004-2005, an increase of 1.8. LMC's FTEF/FTES is higher than CCC's productivity.

FTEF has remained at about 2.5 with the exception on year 2003-2004. That year it was 1.9.

### FTES/FTEF: Automotive Technology

	2002-2003	2003-2004	2004-2005	Change
<b>LMC Program</b>	21.6	27.5	23.4	+1.8
<b>CCC*</b>	13.7	15.8	15.6	+1.9
<b>DVC*</b>	n/a	n/a	n/a	n/a
<b>State Average</b>				

Productivity (FTES/FTEF) is defined as the average number of FTES earned per full-time equivalent instructor. FTES is defined as 525 student contact hours, based on a 15 hour weekly course load for 2 semester at 17.5 weeks per semester (15x2x17.5=525).

\*Data obtained from COGNOS.

### FTEF: Automotive Technology

	2002-2003	2003-2004	2004-2005	Change
<b>FTEF</b>	2.6	1.9	2.5	-.1

**RETENTION RATES:** Retention rate for students in the program has increased from 85% in 2002-2003 to 89% in 2004-2005, an increased of 4%. When compared to the college average, the retention rate for the program has been consistently higher. When retention rates are examined by ethnicity for the last three years, it is observed that the retention rate for African-American increased by 33% and for Filipinos by 21%. Asians experienced a decreased of 4%. A significant increased was observed for African-Americans: from 55% in 2002-2003 to 88% in 2004-2005, an increase of 33%.

### Retention Rates: Automotive Technology

	2002-2003		2003-2004		2004-2005		3-Year Change	
	Program	College	Program	College	Program	College	Program	College
	<b>341</b>	<b>47,311</b>	<b>473</b>	<b>41,959</b>	<b>550</b>	<b>42,937</b>	<b>+209</b>	<b>-4,374</b>
<b>Asian</b>	<b>94%</b>	84%	<b>93%</b>	84%	<b>90%</b>	87%	<b>-4%</b>	3%
<b>African American (non-Hispanic)</b>	<b>55%</b>	73%	<b>65%</b>	73%	<b>88%</b>	72%	<b>33%</b>	-1%
<b>Filipino</b>	<b>63%</b>	84%	<b>94%</b>	84%	<b>84%</b>	82%	<b>21%</b>	-2%
<b>Hispanic</b>	<b>90%</b>	82%	<b>89%</b>	81%	<b>91%</b>	82%	<b>1%</b>	0%
<b>American Indian/Alaskan Native</b>	<b>50%</b>	80%	<b>100%</b>	84%	<b>90%</b>	81%	<b>40%</b>	1%
<b>Other Non-White</b>	<b>91%</b>	81%	<b>87%</b>	80%	<b>89%</b>	79%	<b>-2%</b>	-2%
<b>Pacific Islander</b>	<b>100%</b>	81%	<b>100%</b>	82%	<b>100%</b>	80%	<b>0%</b>	-1%
<b>White Non-Hispanic</b>	<b>87%</b>	84%	<b>94%</b>	85%	<b>89%</b>	84%	<b>2%</b>	0%
<b>Unknown</b>	<b>87%</b>	84%	<b>87%</b>	81%	<b>100%</b>	83%	<b>13%</b>	-1%
<b>All Students</b>	<b>85%</b>	82%	<b>90%</b>	82%	<b>89%</b>	82%	<b>4%</b>	0%
<b>State Average</b>		83%		83%		83%		0%

**DEFINITION:** Student is retained in the course to end of term. A, B, C, D, F, CR, NC, I grade notations.

**MEASUREMENT:** Percent of students retained in courses out of total enrolled in courses. The retention rate is calculated by dividing the numerator (number of students with A, B, C, D, F, CR, NC, I) by the denominator (number of students with A, B, C, D, F, CR, NC, W, I).

**SUCCESS RATES:** The success rate for the program has increased from 67% in 2002-2003 to 73% in 2004-2005, an increase of 6%. Success rate for the program has been higher than the college average for the last two years. When examining success rate by ethnicity, the success rate for Asians decreased from 81% in 2002-2003 to 66% in 2004-2005, a decrease of 15%. The Success rate for African-American students increased from 48% in 2002-2003 to 55% in 2004-2005, a 7% increase; Filipinos increased 21%, Hispanics 7% and Whites 12%. A decrease of success rate was experienced by Asians. Success rates for African-Americans is one of the lowest among other groups of students.

### Success Rates: Automotive Technology

	2002-2003		2003-2004		2004-2005		3-Year Change	
	Program	College	Program	College	Program	College	Program	College
	341	47,311	473	41,959	550	42,937	+209	-4,374
<b>Asian</b>	<b>81%</b>	71%	<b>80%</b>	72%	<b>66%</b>	74%	<b>-15%</b>	3%
<b>African American (non-Hispanic)</b>	<b>48%</b>	51%	<b>32%</b>	51%	<b>55%</b>	50%	<b>7%</b>	-1%
<b>Filipino</b>	<b>44%</b>	70%	<b>85%</b>	71%	<b>65%</b>	70%	<b>21%</b>	0%
<b>Hispanic</b>	<b>67%</b>	65%	<b>63%</b>	66%	<b>74%</b>	66%	<b>7%</b>	1%
<b>American Indian/Alaskan Native</b>	<b>0%</b>	69%	<b>100%</b>	70%	<b>40%</b>	64%	<b>40%</b>	-5%
<b>Other Non-White</b>	<b>74%</b>	61%	<b>53%</b>	65%	<b>89%</b>	65%	<b>15%</b>	4%
<b>Pacific Islander</b>	<b>100%</b>	63%	<b>100%</b>	61%	<b>33%</b>	61%	<b>-67%</b>	-2%
<b>White Non-Hispanic</b>	<b>68%</b>	72%	<b>82%</b>	74%	<b>80%</b>	72%	<b>12%</b>	0%
<b>Unknown</b>	<b>78%</b>	69%	<b>71%</b>	66%	<b>67%</b>	67%	<b>-11%</b>	-2%
<b>All Students</b>	<b>67%</b>	67%	<b>73%</b>	68%	<b>73%</b>	67%	<b>6%</b>	0%
<b>State Average</b>		67%		67%		67%		0%

**DEFINITION:** Student succeeds in the course to end of term. A, B, C, CR grade notations.

**MEASUREMENT:** Percent of students successful in courses out of total enrolled in courses. The success rate is calculated by dividing the numerator (number of students with A, B, C, CR) by the denominator (number of students with A, B, C, D, F, CR, NC, W, I).

**NUMBER OF STUDENTS WITH DELCARED MAJOR WHO COMPLETED 18 UNTS OR MORE:**

The number of students with Automotive Technology as their major with 18 units or more has increased from 31 in 2002-2003 to 45 in 2004-2005, an increase of 14 students. The proportion of Asians, African-Americans and Filipinos increased by 4% in the last three years; Hispanics increased by 5%. Whites decreased by 8%

**Number of Students with Declared Major who Completed 18 Units or More:  
Automotive Technology**

	2002-2003	2003-2004	2004-2005	3-Year Change
	<b>N=31</b>	<b>N=48</b>	<b>N=45</b>	<b>+14</b>
<b>Asian</b>	<b>10%</b>	<b>6%</b>	<b>14%</b>	<b>4%</b>
<b>African American (non-Hispanic)</b>	<b>3%</b>	<b>4%</b>	<b>7%</b>	<b>4%</b>
<b>Filipino</b>	<b>3%</b>	<b>15%</b>	<b>7%</b>	<b>4%</b>
<b>Hispanic</b>	<b>16%</b>	<b>17%</b>	<b>21%</b>	<b>5%</b>
<b>American Indian/Alaskan Native</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>
<b>Other Non-White</b>	<b>3%</b>	<b>4%</b>	<b>2%</b>	<b>-1%</b>
<b>Pacific Islander</b>	<b>3%</b>	<b>4%</b>	<b>0%</b>	<b>-3%</b>
<b>White Non-Hispanic</b>	<b>48%</b>	<b>38%</b>	<b>44%</b>	<b>-4%</b>
<b>Unknown</b>	<b>13%</b>	<b>13%</b>	<b>5%</b>	<b>-8%</b>
<b>All Students</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>-</b>

NOTE: Percentages may not add up to 100% due to rounding.

**NUMBER OF DEGREES AND CERTIFICATES:** A total of three Associate degrees and two certificates have been awarded to students in the program in the last three years.

**Number of Degrees and Certificates: Automotive Technology**

	2002-2003	2003-2004	2004-2005	3-Year Change
<b>Degrees</b>	2	0	1	-1
<b>Certificates</b>	1	0	1	0

## VTEA Core Indicators for: Automotive Technology

CORE INDICATORS	2003-2004		2004-2005		2005-2006	
	College	Percentage above or below State Level	College	Percentage above or below State Level	College	Percentage above or below State Level
Core 1. <b>Achievement</b>	68.72	-10.04	68.90	-10.86	73.93	-5.83
Core 2. <b>Completions</b>	16.67	N/A	00.0	-60.82	4.55	-56.27
Core 3a. <b>Employment</b>	100.00	N/A	78.57	-4.62	63.64	-19.55
Core 3b. <b>Employment Retention</b>	100	N/A	63.64	-19.21	78.57	-4.28
Core 4a <b>Nontraditional Participation</b>	7.56	-21.42	5.14	-24.84	10.03	-19.95
Core 4b. <b>Nontraditional completion</b>	100	N/A	N/R	N/R	00,0	N/R

Data obtained from Chancellor Office VTEA reports.

### DEFINITIONS

**Indicator One: Skill Attainment** – GPA of at least 2.0 on Forms and Grade C & Above on all other reports. Indicator *One* uses enrollments in Apprenticeship, Advanced Occupational or Clearly Occupational courses (coded with SAM Priority codes A-C). Students may be enrolled in more than one program area and may be included in more than one population grouping.

**Indicator Two: Completions** – Certificates, Degrees and Transfers

Indicator *Two* measures completions for vocational student "Leavers and Completers." Receipt of a certificate or degree or enrollment in a California four year public University with or without a degree is considered a completion. Military enrollment was not available for this cohort and was removed from all cohorts on three year presentations for the 2003-04 reports.

**Indicator Three: Placement and Retention**

Indicator *Three* measures *Placement* as UI covered employment or continuation at CSU/UC and *Retention* as three consecutive quarters in UI covered employment for vocational student "Leavers and Completers" in their first year after college. Students found continuing at UC or CSU are considered placed but are removed prior to calculations for retention. Retention is based solely on UI Employed Leavers and Completers.

Military enrollment and federal government employment, although available in previous years, were not available for this cohort. Placement status using military and federal employment was removed from all cohorts on three year presentations for the 2005-06 reports.

**Indicator Four: Equity - Training Leading to Nontraditional Employment**

Indicator *Four*, Participation, measures the participation of students in 2002-03 vocational courses (SAM code A –D) leading to employment where either gender is less than 25% of those employed using 1990 Census data.

Indicator *Four*, Completion, measures Completion of vocational student "Leavers and Completers" in training leading to employment where either gender is less than 25% of those employed using 1990 Census data.