



Trickle-Across Theory: Student Flow Into and Away from the California Community Colleges

Mei Cooc & Willard Hom
Chancellor's Office, CCC

Session Objectives

- Release and discuss the results of a swirl analysis for each district and for the system.
- Collect input from IR staff, et al, about future efforts in this area

Three Issues

1. “Losing” residents and “gaining” nonresidents (headcounts) can be political concerns.
2. Swirl can affect instit'l funding (change to units and FTES), in some budget situations.
3. Swirl can affect performance indicators (change to completion/award rates).

Student Swirl—A Narrowed Concept

- Defined here as exclusive enrollment of individuals in a community college district other than the community college district of their official residence

Terms

- Movers
 - Imports
 - Exports
- Stayers

Data Source

- District boundary zip codes
 - GIS Collaborative
- Student-level data
 - First-time Fall 2007 Cohort
 - First time the student was reported in the MIS with a headcount status not equal to “X” (differ from enrollment status from Data Mart)
 - First time across all districts
 - SSN
 - Enrollment in single district only
 - Data as of October 2011

Overview

- Statewide movers and stayers
 - Headcount
 - Units
 - Credit awards
- Top importing and exporting districts
 - Headcount
 - Units
- Districts with Least Imports and Exports by Headcount

The State at a Glance - Headcount

- 80.7% stayers
- The other 19.3% ...
 - 12.6% movers
 - 6.6% zip code mismatched
 - Unknown residential zip code (i.e., XXXXX)
 - Residential zip code not mapped to any district
 - Will exclude the 6.6% with zip code mismatch

The State at a Glance - Headcount

Enrollment	Headcount
<i>Movers</i>	13.5%
<i>Stayers</i>	86.5%

The State at a Glance - Headcount

Enrollment	Age Group							Total	
	<=19	20-24	25-29	30-34	35-39	40-49	50+		Unknown
<i>Movers</i>	12.1%	12.2%	18.1%	18.9%	18.7%	16.9%	12.8%	13.1%	13.5%
<i>Stayers</i>	87.9%	87.8%	81.9%	81.1%	81.3%	83.1%	87.2%	86.9%	86.5%

The State at a Glance - Headcount

Enrollment	Age Group							Total	
	<=19	20-24	25-29	30-34	35-39	40-49	50+		Unknown
<i>Movers</i>	12.1%	12.2%	18.1%	18.9%	18.7%	16.9%	12.8%	13.1%	13.5%
<i>Stayers</i>	87.9%	87.8%	81.9%	81.1%	81.3%	83.1%	87.2%	86.9%	86.5%

- Students between ages of 25 to 49 tend to “move” more than other age groups.

The State at a Glance - Headcount

Enrollment	Race/Ethnicity							Total	
	Asian	Black or African American	Hispanic/Latino	American Indian or Alaska Native	Native Hawaiian or Other Pacific Islander	Two or More Races	White		Unknown/Non-Respondent
Movers	14.4%	14.9%	13.8%	11.9%	12.5%	7.4%	12.8%	13.8%	13.5%
Stayers	85.6%	85.1%	86.2%	88.1%	87.5%	92.6%	87.2%	86.2%	86.5%

The State at a Glance - Headcount

Enrollment	Race/Ethnicity							Total	
	Asian	Black or African American	Hispanic/Latino	American Indian or Alaska Native	Native Hawaiian or Other Pacific Islander	Two or More Races	White		Unknown/Non-Respondent
Movers	14.4%	14.9%	13.8%	11.9%	12.5%	7.4%	12.8%	13.8%	13.5%
Stayers	85.6%	85.1%	86.2%	88.1%	87.5%	92.6%	87.2%	86.2%	86.5%

- More movers in Asian, African American, and Hispanic (and Unknown/NR) groups

The State at a Glance - Headcount

Enrollment	Gender			Total
	Female	Male	Unknown	
Movers	11.6%	15.6%	11.8%	13.5%
Stayers	88.4%	84.4%	88.2%	86.5%

The State at a Glance - Headcount

Enrollment	Gender		
	Female	Male	Unknown
Movers	11.6%	15.6%	11.8%
Stayers	88.4%	84.4%	88.2%
			Total
			13.5%
			86.5%

- Males are more likely to “move” than females.

The State at a Glance – Units Earned

- Credit units earned only
- Units per headcount
 - Includes an adjusted measure due to 21.5% of students who earned zero credit units
 - Non-credit students
 - Attempted but did not earn credit units

Credit Units per Headcount

Fall 07 Cohort	Units/Headcount	Adj. Units/Headcount
Movers	21.5	26.2
Stayers	23.3	29.9

- Stayers earned more units than movers.

Units/Headcount by Age Group

Fall 07 Cohort	Units/Headcount by Age Group							Overall	
	<=19	20-24	25-29	30-34	35-39	40-49	50+		Unknown
Movers	10.7	37.2	15.5	12.5	8.8	7.9	6.7	0.8	21.5
Stayers	11.6	36.7	16.9	13.9	11.8	11.2	7.7	1.0	23.3

- Students between the ages of 20-24 earned more credit units than other age groups
- Stayers typically earned more units than movers in most age groups, except in the 20-24 age group.

Adjusted Unit/Headcount by Age Group

Fall 07 Cohort	Adjusted Unit/Headcount by Age Group						Overall		
	<=19	20-24	25-29	30-34	35-39	40-49		50+	Unknown
Movers	14.4	41.7	18.9	15.5	11.3	10.2	8.9	11.8	26.2
Stayers	15.7	41.5	23.2	20.2	18.4	16.8	13.6	12.6	29.9

- Students between the ages of 20-24 earned more credit units than other age groups
- Stayers typically earned more units than movers in most age groups, except in the 20-24 age group.

Units/Headcount by Race/Ethnicity

Fall 07 Cohort	Units/Headcount by Race/Ethnicity							Overall	
	Asian	Black or African American	Hispanic / Latino	American Indian or Alaska Native	Native Hawaiian or Other Pacific Islander	Two or More Races	White		Unknown/ Non-Respondent
Movers	27.9	15.4	20.8	16.6	18.6	31.5	21.7	19.0	21.5
Stayers	27.9	15.6	23.6	18.9	22.3	31.0	24.0	19.5	23.3

- With the exception of “Two or more races”, Asians earned more units than other race/ethnic groups
- Stayers earned more units than movers in all race/ethnic groups except Asian and Two or More races—a movement “trade-off”?

Adjusted Unit/Headcount by Race/Ethnicity

Fall 07 Cohort	Adjusted Unit/Headcount by Race/Ethnicity							Overall	
	Asian	Black or African American	Hispanic / Latino	American Indian or Alaska Native	Native Hawaiian or Other Pacific Islander	Two or More Races	White		Unknown/ Non-Respondent
Movers	33.3	21.4	25.3	21.4	23.9	34.1	25.9	23.5	26.2
Stayers	35.2	22.4	30.7	25.0	28.3	33.9	29.4	27.4	29.9

- Asians earned more units than other race/ethnic groups
- Stayers earned more units than movers in all race/ethnic groups except Two or More Races group.

Units/Headcount by Gender

Fall 07 Cohort	Units/Headcount by Gender			Total
	Female	Male	Unknown	
Movers	24.3	19.2	17.4	21.5
Stayers	23.7	23.1	16.8	23.3

- Females averaged more units than males.
- Female movers averaged slightly more units than female stayers

Adjusted Unit/Headcount by Gender

Fall 07 Cohort	Adjusted Unit/Headcount by Gender			Total
	Female	Male	Unknown	
Movers	29.9	23.3	22.1	26.2
Stayers	30.4	29.5	23.8	29.9

- Females averaged more units than males.
- Stayers of both gender averaged more units than movers.

The State at a Glance - Awards

- Credit awards only
 - Associate of Arts/Science
 - Certificates requiring at least 6 units
 - Other credit awards under 6 semester units.

Percent of Students Receiving Awards

Fall 07 Cohort	No Award	Award	Total
Movers	91.4%	8.6%	100%
Stayers	91.1%	8.9%	100%

- Distribution of students receiving awards is about the same for movers and stayers.

Percent of Awards Given

Fall 07 Cohort	Headcount	Awards
Movers	13.5%	16.6%
Stayers	86.5%	83.4%

- 83.4% of the awards were earned by stayers.
- Movers accounted for 13.5% of the cohort headcount, but earned 16.6% of credit awards.

*Headcount is unduplicated, but a student could have earned multiple awards.

Awards Given by Age Group

Fall 07 Cohort	Awards by Age Group					Total		
	<=19	20-24	25-29	30-34	35-39		40-49	50+
Movers	15.1%	16.3%	18.4%	11.8%	17.5%	17.2%	19.0%	16.6%
Stayers	84.9%	83.7%	81.6%	88.2%	82.5%	82.8%	81.0%	83.4%

- Movers in the highlighted age groups earned a bigger share than the other age groups.

*Headcount is unduplicated, but a student could have earned multiple awards.

Awards Given by Ethnicity

Fall 07 Cohort	Race/Ethnicity							Total	
	Asian	Black or African American	Hispanic /Latino	American Indian or Alaska Native	Native Hawaiian or Other Pacific Islander	Two or More Races	White		Unknown/ Non-Respondent
Movers	18.1%	13.6%	14.8%	5.3%	0.0%	5.0%	18.0%	16.3%	16.6%
Stayers	81.9%	86.4%	85.2%	94.7%	100.0%	95.0%	82.0%	83.7%	83.4%

- Asian and White movers earned a bigger share than the other race/ethnic groups.

*Headcount is unduplicated, but a student could have earned multiple awards.

Awards Given by Gender

Fall 07 Cohort	Gender		Total
	Female	Male	
Movers	14.3%	19.4%	16.6%
Stayers	85.7%	80.6%	83.4%

- Male movers earned a bigger share than female movers.

*Headcount is unduplicated, but a student could have earned multiple awards.

Importing and Exporting Districts

Top Importing Districts by Headcounts

District of Enrollment	Imports	Stayers
West Kern	76.3%	23.7%
Santa Monica	67.8%	32.2%
Foothill-De Anza	44.0%	56.0%
Rio Hondo	39.7%	60.3%
Citrus	39.6%	60.4%
Palo Verde	34.4%	65.6%
Pasadena Area	33.9%	66.1%
Rancho Santiago	32.1%	67.9%
Coast	31.1%	68.9%
Feather River	30.9%	69.1%
Cerritos	30.1%	69.9%
West Valley-Mission	26.3%	73.8%
Santa Barbara	26.0%	74.0%
Mt. San Antonio	24.9%	75.1%
Glendale	21.5%	78.5%

Top Importing Districts by Headcounts

District of Enrollment	Imports	Stayers
West Kern	76.3%	23.7%
Santa Monica	67.8%	32.2%
Foothill-De Anza	44.0%	56.0%
Rio Hondo	39.7%	60.3%
Citrus	39.6%	60.4%
Palo Verde	34.4%	65.6%
Pasadena Area	33.9%	66.1%
Rancho Santiago	32.1%	67.9%
Coast	31.1%	68.9%
Feather River	30.9%	69.1%
Cerritos	30.1%	69.9%
West Valley-Mission	26.3%	73.8%
Santa Barbara	26.0%	74.0%
Mt. San Antonio	24.9%	75.1%
Glendale	21.5%	78.5%

67.2% from Kern CCD

46.6% from LA CCD

Top Exporting Districts by Headcounts

District of Residence	Exports	Stayers
Rio Hondo	84.9%	15.1%
San Jose-Evergreen	30.0%	70.0%
Kern	29.6%	70.4%
Los Angeles	21.2%	78.8%

LA, Pasadena, Mt. SAC, North Orange, etc.

Districts Importing More Units/Headcount

District of Enrollment	Unit/Headcount		
	Imports	Stayers	Difference
Copper Mountain	34.0	18.0	16.0
San Luis Obispo	38.7	23.8	14.9
Santa Barbara	29.4	19.0	10.4
Mendocino-Lake	23.4	14.2	9.2
West Valley-Mission	22.7	14.3	8.4
Butte-Glenn	33.6	26.7	6.9
Mt. San Jacinto	29.7	24.7	5.1
Shasta-Tehama-Trinity	26.8	21.9	4.9
Pasadena Area	35.7	32.0	3.7
Santa Monica	27.8	24.4	3.4
Citrus	35.6	32.8	2.8

- Imports from 25 of the 72 districts earned more units/headcount than stayers.
- Copper Mountain's imports earned far more units than its stayers.

Districts Importing More Units/Headcount

District	Headcount		Unit/Headcount		
	Imports	Stayers	Imports	Stayers	Difference
	Copper Mountain	0.3%	99.7%	34.0	18.0
San Luis Obispo	7.9%	92.1%	38.7	23.8	14.9
Santa Barbara	26.0%	74.0%	29.4	19.0	10.4
Mendocino-Lake	3.9%	96.1%	23.4	14.2	9.2
West Valley-Mission	26.3%	73.8%	22.7	14.3	8.4
Butte-Glenn	8.1%	91.9%	33.6	26.7	6.9
Mt. San Jacinto	2.0%	98.0%	29.7	24.7	5.1
Shasta-Tehama-Trinity	2.0%	98.0%	26.8	21.9	4.9
Pasadena Area	33.9%	66.1%	35.7	32.0	3.7
Santa Monica	67.8%	32.2%	27.8	24.4	3.4
Citrus	39.6%	60.4%	35.6	32.8	2.8

- Copper Mountain’s imports earned far more units than its stayers, but Copper Mountain’s imports only account for 0.3% of the cohort enrollment.

Districts Importing More Units/Headcount

District	Headcount		Unit/Headcount		
	Imports	Stayers	Imports	Stayers	Difference
Copper Mountain	0.3%	99.7%	34.0	18.0	16.0
San Luis Obispo	7.9%	92.1%	38.7	23.8	14.9
Santa Barbara	26.0%	74.0%	29.4	19.0	10.4
Mendocino-Lake	3.9%	96.1%	23.4	14.2	9.2
West Valley-Mission	26.3%	73.8%	22.7	14.3	8.4
Butte-Glenn	8.1%	91.9%	33.6	26.7	6.9
Mt. San Jacinto	2.0%	98.0%	29.7	24.7	5.1
Shasta-Tehama-Trinity	2.0%	98.0%	26.8	21.9	4.9
Pasadena Area	33.9%	66.1%	35.7	32.0	3.7
Santa Monica	67.8%	32.2%	27.8	24.4	3.4
Citrus	39.6%	60.4%	35.6	32.8	2.8

- The highlighted districts' imports earned more units than the stayers, and imports account for more than a quarter of these districts' cohort headcounts.

Districts Importing More Units/Headcount

District	Headcount		Unit/Headcount		
	Imports	Stayers	Imports	Stayers	Difference
Copper Mountain	0.3%	99.7%	34.0	18.0	16.0
San Luis Obispo	7.9%	92.1%	38.7	23.8	14.9
Santa Barbara	26.0%	74.0%	29.4	19.0	10.4
Mendocino-Lake	3.9%	96.1%	23.4	14.2	9.2
West Valley-Mission	26.3%	73.8%	22.7	14.3	8.4
Butte-Glenn	8.1%	91.9%	33.6	26.7	6.9
Mt. San Jacinto	2.0%	98.0%	29.7	24.7	5.1
Shasta-Tehama-Trinity	2.0%	98.0%	26.8	21.9	4.9
Pasadena Area	33.9%	66.1%	35.7	32.0	3.7
Santa Monica	67.8%	32.2%	27.8	24.4	3.4
Citrus	39.6%	60.4%	35.6	32.8	2.8

- Santa Monica is serving more imports than its residents, in headcount and units.

Districts Where Stayers Earned More Units/Headcount

District of Enrollment	Unit/Headcount		
	Imports	Stayers	Difference
Hartnell	3.1	24.4	-21.4
Kern	10.7	22.8	-12.1
Gavilan	13.4	24.7	-11.3
Desert	15.6	26.6	-11.0
Yuba	9.3	19.0	-9.7
Rio Hondo	1.4	10.7	-9.3
Siskiyou Joint	8.0	16.6	-8.7
San Bernardino	14.6	23.2	-8.6
Lake Tahoe	19.4	28.0	-8.6
Sequoias	16.3	24.9	-8.6
San Jose-Evergreen	17.7	25.7	-8.0
Chabot-Las Positas	22.2	30.0	-7.8
Palo Verde	3.3	11.1	-7.7
Barstow	5.9	13.5	-7.6
West Kern	1.5	8.9	-7.5
Chaffey	20.5	27.5	-7.0

- Stayers from 47 of the 72 districts averaged more units than their imports.

Districts Where Stayers Earned More Units/Headcount

District of Enrollment	Headcount		Unit/Headcount		
	Imports	Stayers	Imports	Stayers	Difference
Hartnell	16.9%	83.1%	3.1	24.4	-21.4
Kern	2.3%	97.7%	10.7	22.8	-12.1
Gavilan	2.9%	97.1%	13.4	24.7	-11.3
Desert	1.8%	98.2%	15.6	26.6	-11.0
Yuba	3.6%	96.4%	9.3	19.0	-9.7
Rio Hondo	39.7%	60.3%	1.4	10.7	-9.3
Siskiyou Joint	3.6%	96.4%	8.0	16.6	-8.7
San Bernardino	6.4%	93.6%	14.6	23.2	-8.6
Lake Tahoe	10.3%	89.7%	19.4	28.0	-8.6
Sequoias	2.8%	97.2%	16.3	24.9	-8.6
San Jose-Evergreen	8.6%	91.4%	17.7	25.7	-8.0
Chabot-Las Positas	12.8%	87.2%	22.2	30.0	-7.8
Palo Verde	34.4%	65.6%	3.3	11.1	-7.7
Barstow	18.8%	81.2%	5.9	13.5	-7.6
West Kern	76.3%	23.7%	1.5	8.9	-7.5
Chaffey	7.9%	92.1%	20.5	27.5	-7.0

- With the exception of West Kern, these districts primarily served their residents.

Special Course Effect?

- Are West Kern and Rio Hondo drawing students for single courses?

Districts Exporting More Units/Headcount

District	Units/Headcount		
	Exports	Stayers	Difference
Feather River	40.9	14.8	26.1
Siskiyou Joint	39.4	16.6	22.8
Rio Hondo	29.1	10.7	18.4
Rancho Santiago	28.4	15.8	12.6
West Valley-Mission	26.8	14.3	12.6
Gavilan	36.1	24.7	11.4
Peralta	20.0	12.2	7.9
Los Angeles	27.1	19.8	7.3
Cerritos	24.4	17.1	7.2
San Francisco	20.2	13.5	6.7
Allan Hancock	26.0	19.8	6.2
Monterey Peninsula	20.5	14.6	5.9
Marin	19.5	15.2	4.3
Yuba	23.0	19.0	4.0
San Diego	22.4	18.8	3.6
Sierra Joint	18.5	16.5	2.0
San Jose-Evergreen	27.2	25.7	1.4

- Exports from 23 of the 72 districts averaged more units than stayers.
- Feather River's exports averaged far more units than its stayers.

Districts Exporting More Units/Headcount

District	Headcount		Units/Headcount		
	Exports	Stayers	Exports	Stayers	Difference
Feather River	2.6%	97.4%	40.9	14.8	26.1
Siskiyou Joint	2.0%	98.0%	39.4	16.6	22.8
Rio Hondo	84.9%	15.1%	29.1	10.7	18.4
Rancho Santiago	4.4%	95.6%	28.4	15.8	12.6
West Valley-Mission	11.2%	88.8%	26.8	14.3	12.6
Gavilan	0.8%	99.2%	36.1	24.7	11.4
Peralta	6.6%	93.4%	20.0	12.2	7.9
Los Angeles	21.2%	78.8%	27.1	19.8	7.3
Cerritos	3.7%	96.3%	24.4	17.1	7.2
San Francisco	5.7%	94.3%	20.2	13.5	6.7
Allan Hancock	5.5%	94.5%	26.0	19.8	6.2
Monterey Peninsula	1.1%	98.9%	20.5	14.6	5.9
Marin	18.2%	81.8%	19.5	15.2	4.3
Yuba	5.0%	95.0%	23.0	19.0	4.0
San Diego	7.3%	92.7%	22.4	18.8	3.6
Sierra Joint	4.7%	95.3%	18.5	16.5	2.0
San Jose-Evergreen	30.0%	70.0%	27.2	25.7	1.4

- Feather River's exports averaged far more units than its stayers, but only accounted for 2.6% of its residents in the cohort.

Districts Exported More Units/Headcount

District	Headcount		Units/Headcount		
	Exports	Stayers	Exports	Stayers	Difference
Feather River	2.6%	97.4%	40.9	14.8	26.1
Siskiyou Joint	2.0%	98.0%	39.4	16.6	22.8
Rio Hondo	84.9%	15.1%	29.1	10.7	18.4
Rancho Santiago	4.4%	95.6%	28.4	15.8	12.6
West Valley-Mission	11.2%	88.8%	26.8	14.3	12.6
Gavilan	0.8%	99.2%	36.1	24.7	11.4
Peralta	6.6%	93.4%	20.0	12.2	7.9
Los Angeles	21.2%	78.8%	27.1	19.8	7.3
Cerritos	3.7%	96.3%	24.4	17.1	7.2
San Francisco	5.7%	94.3%	20.2	13.5	6.7
Allan Hancock	5.5%	94.5%	26.0	19.8	6.2
Monterey Peninsula	1.1%	98.9%	20.5	14.6	5.9
Marin	18.2%	81.8%	19.5	15.2	4.3
Yuba	5.0%	95.0%	23.0	19.0	4.0
San Diego	7.3%	92.7%	22.4	18.8	3.6
Sierra Joint	4.7%	95.3%	18.5	16.5	2.0
San Jose-Evergreen	30.0%	70.0%	27.2	25.7	1.4

- The highlighted districts' exports earned more units than the stayers, and exports accounted for more than 18% of the district residents in the cohort.

Districts Exported More Units/Headcount

District	Headcount		Units/Headcount		
	Exports	Stayers	Exports	Stayers	Difference
Feather River	2.6%	97.4%	40.9	14.8	26.1
Siskiyou Joint	2.0%	98.0%	39.4	16.6	22.8
Rio Hondo	84.9%	15.1%	29.1	10.7	18.4
Rancho Santiago	4.4%	95.6%	28.4	15.8	12.6
West Valley-Mission	11.2%	88.8%	26.8	14.3	12.6
Gavilan	0.8%	99.2%	36.1	24.7	11.4
Peralta	6.6%	93.4%	20.0	12.2	7.9
Los Angeles	21.2%	78.8%	27.1	19.8	7.3
Cerritos	3.7%	96.3%	24.4	17.1	7.2
San Francisco	5.7%	94.3%	20.2	13.5	6.7
Allan Hancock	5.5%	94.5%	26.0	19.8	6.2
Monterey Peninsula	1.1%	98.9%	20.5	14.6	5.9
Marin	18.2%	81.8%	19.5	15.2	4.3
Yuba	5.0%	95.0%	23.0	19.0	4.0
San Diego	7.3%	92.7%	22.4	18.8	3.6
Sierra Joint	4.7%	95.3%	18.5	16.5	2.0
San Jose-Evergreen	30.0%	70.0%	27.2	25.7	1.4

- Most of the residents of Rio Hondo are taking a lot of units in other districts.

Some Hypotheses

- Exported student residence in proximity to importing district (travel factor)
- Exported student worksite in proximity to importing district (travel factor)
- Perceived advantage of institutional qualities (aside from travel factor) at importing district

Districts Where Stayers Earned More Units/Headcount

District	Headcount		Units/Headcount		
	Exports	Stayers	Exports	Stayers	Difference
Imperial	8.3%	91.7%	9.5	42.9	-33.4
Lake Tahoe	0.0%	100.0%	0.0	28.0	-28.0
Santa Clarita	2.7%	97.3%	9.9	33.8	-23.9
Kern	29.6%	70.4%	3.2	22.8	-19.6
Copper Mountain	0.0%	100.0%	0.0	18.0	-18.0
Ventura County	4.5%	95.5%	12.8	29.0	-16.1
Foothill-De Anza	3.5%	96.5%	13.7	29.8	-16.1
Pasadena Area	5.2%	94.8%	16.8	32.0	-15.2
Coast	4.9%	95.1%	15.2	29.7	-14.5

- Stayers from 48 of the 72 districts averaged more units than their exports.

Districts with Least Imports and Exports by Headcount

Districts with Least Imports

District of Enrollment	Headcount	
	Imports	Stayers
Copper Mountain	0.3%	99.7%
Imperial	0.5%	99.5%
State Center	1.2%	98.8%
Victor Valley	1.3%	98.7%
Desert	1.8%	98.2%
Solano	1.8%	98.2%
Redwoods	1.9%	98.1%
Shasta-Tehama-Trinity	2.0%	98.0%
Mt. San Jacinto	2.0%	98.0%

- 38 of the 72 districts enrolled less than 10% imports (i.e., at least 90% of students are residents).

Districts with Least Exports

District of Residence	Headcount	
	Exports	Stayers
Lake Tahoe	0.0%	100.0%
Copper Mountain	0.0%	100.0%
Palo Verde	0.0%	100.0%
West Kern	0.0%	100.0%
Barstow	0.2%	99.8%
Santa Monica	0.5%	99.5%
Lassen	0.5%	99.5%
West Hills	0.6%	99.4%
Santa Barbara	0.6%	99.4%
Napa Valley	0.7%	99.3%
Gavilan	0.8%	99.2%
Butte-Glenn	0.9%	99.1%

- 58 of the 72 districts have less than 10% exports (i.e., these districts served at least 90% of their residents in cohort).

Conclusion

- This type of swirl can distinguish districts.
- District-specific reports will become available as resources permit.
- Additional analyses are planned.

References

- Adelman, C. (2005). Moving into town—and moving on: The community college in the lives of traditional-age students. Washington, D.C.: U.S. Department of Education.
- Willett, T. & Hom, W. (2007). “Student Flow Analysis for a Community College.” *Journal of Applied Research in the Community College*.15 (1): 17-27.

Contact Information

- Mei Cooc, Specialist
Research, Analysis, and Accountability Unit,
CCCCO
- Willard C. Hom, Director
Research, Analysis, and Accountability Unit,
CCCCO

mcooc@ccccco.edu or (916) 327-5883



Thank you for your participation.

Mei & Willard