

# Paper 163-2019

## A Collection of Maintenance-Free SAS® Web Report Studio Reports



Carlos Piemonti  
University of Central Florida

**SESUG 2019**  
**WILLIAMSBURG, VA**  
OCTOBER 20-22

# Presenter

Carlos Piemonti

Decision Support Developer, UCF

**Carlos Piemonti joined Institutional Knowledge Management (IKM) at the University of Central Florida in Fall 2013. Carlos uses SAS® in his daily responsibilities as developer. He has used SAS for more than 9 years.**



# UCF



# Challenge

- Design
  - Maintenance-free
    - 11 reports, 67 tabs, 406 indicators\*, 3 information maps
    - Plus titles and footnotes
    - Rolling forward a year: section filters vs. info maps and lookup table
  - Fit on one screen
    - looking after users with tablets
- Technical
  - SAS® Web Report Studio vs. browser issues - text boxes errors



# Password protected environment

Welcome to Pegasus Mine Portal

NID:

Password:


**SIGN ON**

 **Institutional  
Knowledge Management**  
UNIVERSITY OF CENTRAL FLORIDA




[Click here to refresh collection.](#)


### **SDES Dashboard - Fall Enrollment.srx**

 UCF level content - Fall Enrollment by Gender and Residency, by Ethnicity, and by College. Linked also with Undergrad, Graduate, and Medical level content reports


### **SDES Dashboard - New Students.srx**

 University level content - New Students by Admit Type, by Gender, by Ethnicity, and by Semester. Linked also with Undergrad, Graduate, and Medical level content reports


### **SDES Dashboard - FTIC Retention, Graduation, Progression.srx**

 First Time In College for 'Summer-Fall Full-Time', 'Summer-Fall All', and 'Fall Full-Time' cohorts. Retention, Graduation, and Progression reports, by Gender and by Ethnicity

### **SDES Dashboard - FCS Transfer Retentn, Graduatn, Prgrssn.srx**

 FCS Transfer for 'Summer-Fall Full-Time', 'Summer-Fall All', and 'Fall Full-Time' cohorts. Retention, Graduation, and Progression reports, by Gender and by Ethnicity

### **SDES Dashboard - Other Transfer RGP.srx**

 Other Transfer for 'Summer-Fall All' and 'Fall Full-Time' cohorts. Retention, Graduation, and Progression reports, by Gender and by Ethnicity

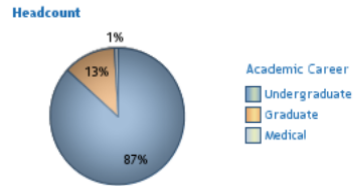


by Gender and Residency

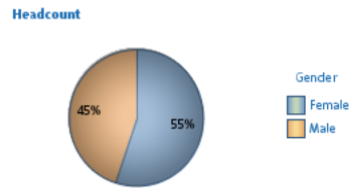
by Ethnicity

by College

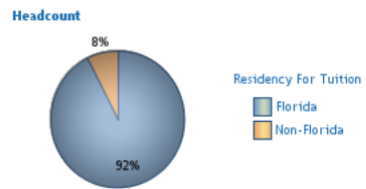
Fall 2016



Fall 2016



Fall 2016



Click on the buttons below to access other reports

UNDERGRAD >

GRADUATE >

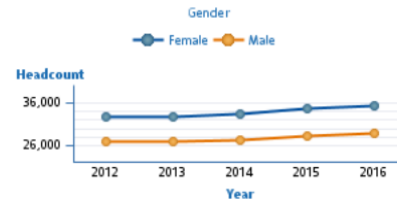
MEDICAL >

Fall UCF Enrollment by Career



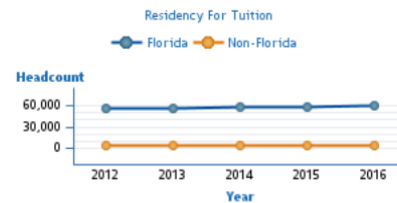
Year	2012	2013	2014	2015	2016
Undergraduate	50,982	51,298	52,536	54,527	55,783
Graduate	8,526	8,121	7,865	8,029	8,075
Medical	277	351	420	460	477
Total	59,785	59,770	60,821	63,016	64,335

Fall UCF Enrollment by Gender



Year	2012	2013	2014	2015	2016
Female	32,898	32,827	33,500	34,708	35,297
Male	26,887	26,943	27,321	28,308	29,038
Total	59,785	59,770	60,821	63,016	64,335

Fall UCF Enrollment by Residency



Year	2012	2013	2014	2015	2016
Florida	56,727	56,605	57,233	58,808	59,503
Non-Florida	3,058	3,165	3,588	4,208	4,832
Total	59,785	59,770	60,821	63,016	64,335





File Edit View Insert Data Edit View

by Gender and Residency by Ethnicity by College

Header

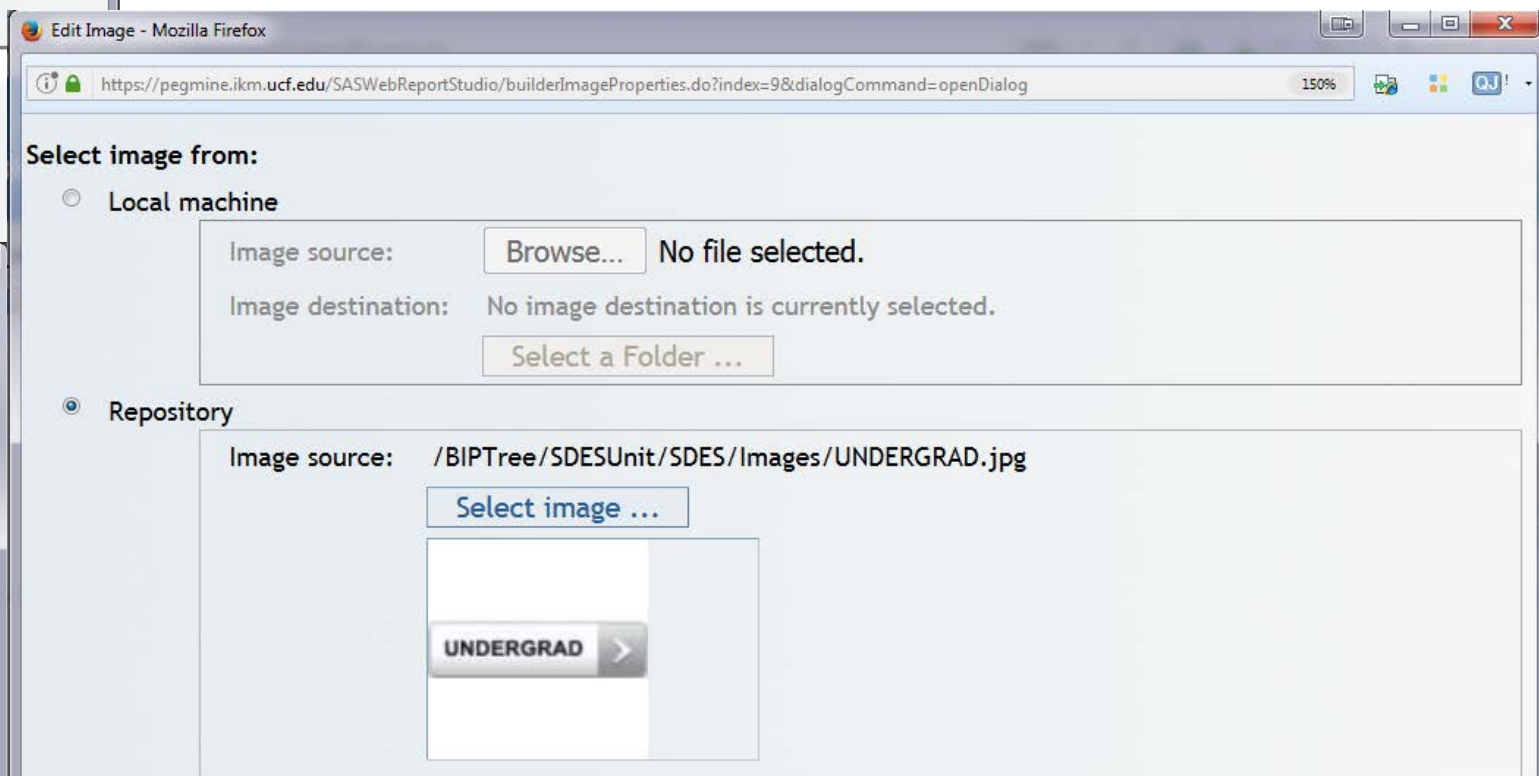
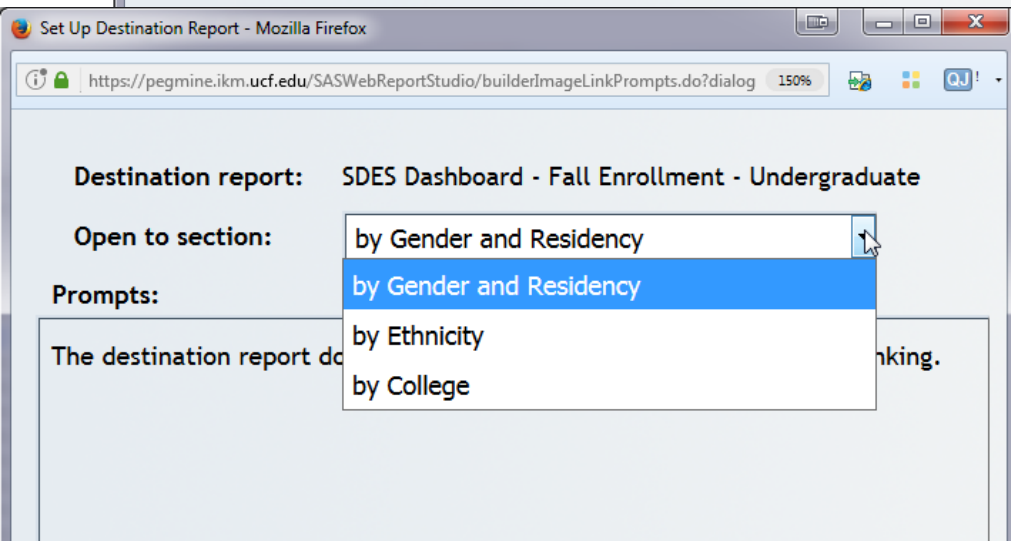
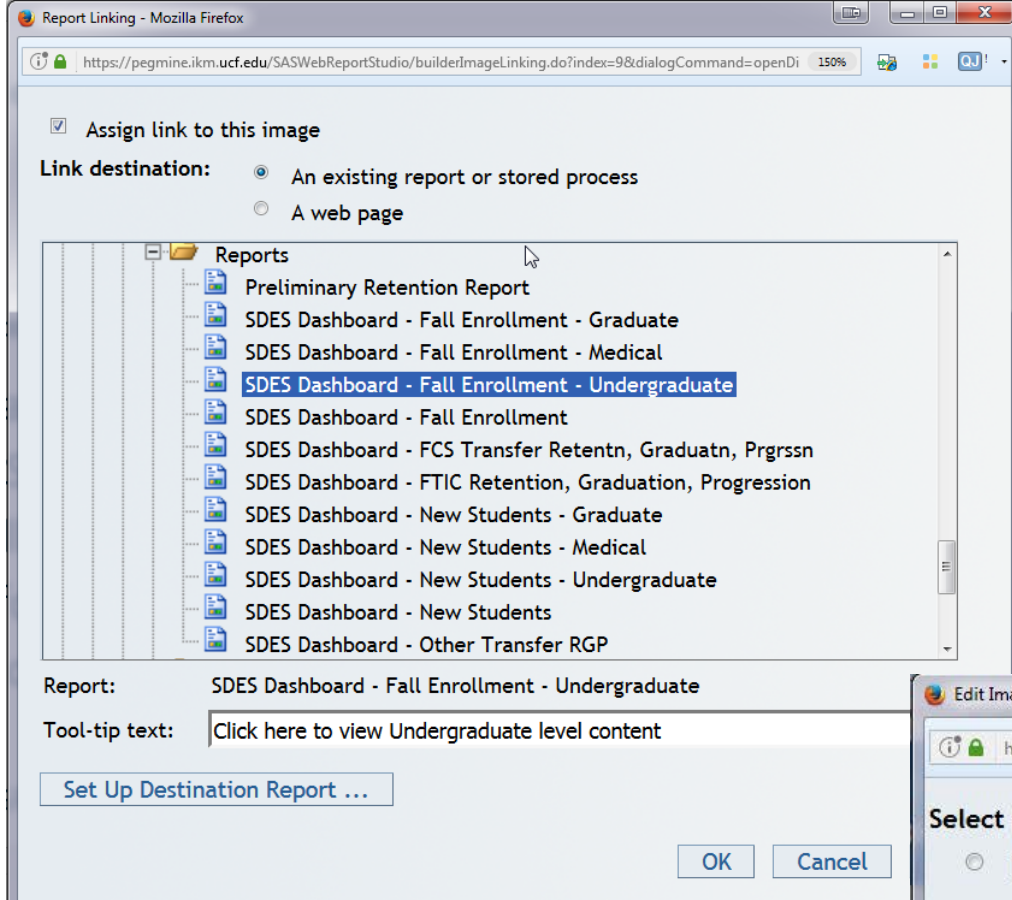
Text5 [Term_m][Year_m...] Graph4 Academic Career, Hea...	Text2 [Term_m] UCF Enro... Graph1 Year, Headcount, Acad...	Table1 Headcount, Year, Academic ...		
Text6 [Term_m][Year_m...] Graph5 Gender, Headcount	Text3 [Term_m] UCF Enro... Graph2 Year, Headcount, Gend ...	Table2 Headcount, Year, Gender		
Text7 [Term_m][Year_m...] Graph6 Residency For Tulti ...	Text4 [Term_m] UCF Enro... Graph3 Year, Headcount, Resi ...	Table3 Headcount, Year, Residenc ...		
Text1 Click on the button ... Edit ... Report Linking ... Remove Image UNDERGRAD > UNDERGRAD.jpg			Text1 Click on the button ... GRADUATE > GRADUATE.jpg	Text1 Click on the button ... MEDICAL > MED.jpg

Footer

Source: Student Instruction File (SIF)  
Best viewed at 1024x768 in Internet Ex ...







# Information map maintenance

**Edit Filter**

Definition

Filter name: Years

Description: Filters out most recent 5-years

Data item: < Select an item > Edit Data Item...

Condition: < Select a value >

Value(s): < Select a value >

Add ▼ Update ▼ Combinations ▲

Filter combinations:

Year = ('2015', '2014', '2013', '2012', '2016')	AND
Semester = ('2')	

Edit ▲ Delete

AND OR NOT Group ( ) Split ▲ ▼

☐ Establish dependencies between prompts

☒ Filter expression:

☐ Hide from user

OK Cancel Help

**Data Item Properties**

Definition

Classifications, Aggregations, For...

Value-Generation Method

Actions

Definition

Data item name: MAX\_YEAR

ID: MAX\_YEAR

Location: / Browse...

Description: Flag the maximum year available

☐ Include in the default query

Expression Settings

Type: Character

Expression: CASE WHEN <<ENROLLMENT\_FACT.TERM\_YEAR>> = '2016' THEN 'Y'  
ELSE 'N'  
END

Edit...


Selected Data Items

MAX\_YEAR


OK Cancel Help

[Click here to refresh collection.](#)


### **SDES Dashboard - Fall Enrollment.srx**

 UCF level content - Fall Enrollment by Gender and Residency, by Ethnicity, and by College. Linked also with Undergrad, Graduate, and Medical level content reports


### **SDES Dashboard - New Students.srx**

 University level content - New Students by Admit Type, by Gender, by Ethnicity, and by Semester. Linked also with Undergrad, Graduate, and Medical level content reports


### **SDES Dashboard - FTIC Retention, Graduation, Progression.srx**

 First Time In College for 'Summer-Fall Full-Time', 'Summer-Fall All', and 'Fall Full-Time' cohorts. Retention, Graduation, and Progression reports, by Gender and by Ethnicity

### **SDES Dashboard - FCS Transfer Retentn, Graduatn, Prgrssn.srx**

 FCS Transfer for 'Summer-Fall Full-Time', 'Summer-Fall All', and 'Fall Full-Time' cohorts. Retention, Graduation, and Progression reports, by Gender and by Ethnicity

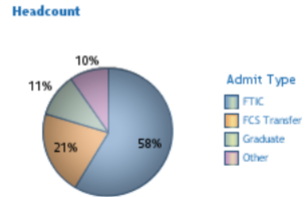
### **SDES Dashboard - Other Transfer RGP.srx**

 Other Transfer for 'Summer-Fall All' and 'Fall Full-Time' cohorts. Retention, Graduation, and Progression reports, by Gender and by Ethnicity

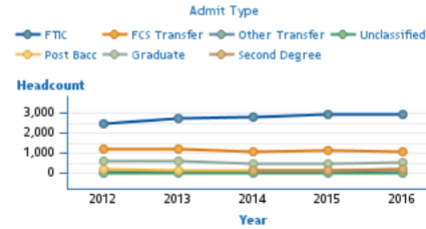


by Admit Type by Gender: Summer Fall Gdr Spring Gdr by Ethnicity: Summer Fall Eth Spring Eth by Semester

### Summer 2016

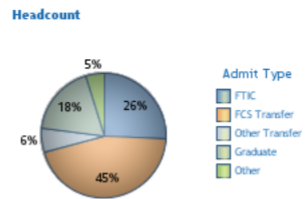


### Summer UCF New Enrollment

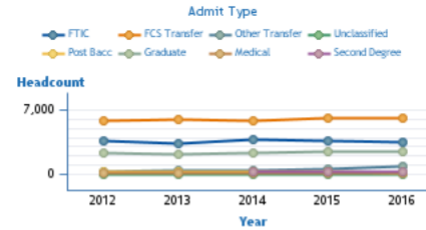


Semester	Headcount				
Year	2012	2013	2014	2015	2016
Admit Type					
FTIC	2,491	2,732	2,768	2,902	2,923
FCS Transfer	1,179	1,167	1,093	1,108	1,055
Other Transfer	75	84	84	96	139
Unclassified	3	8	9	5	7
Post Bacc	205	148	152	154	169
Graduate	619	571	469	477	528
Second Degree	.	.	162	160	176
Total	4,572	4,710	4,737	4,902	4,997

### Fall 2016

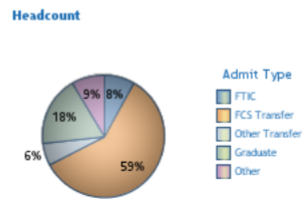


### Fall UCF New Enrollment

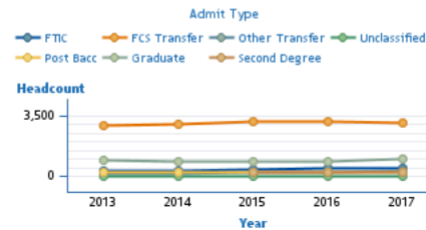


Semester	Headcount				
Year	2012	2013	2014	2015	2016
Admit Type					
FTIC	3,638	3,378	3,745	3,716	3,536
FCS Transfer	5,825	5,951	5,789	6,132	6,124
Other Transfer	285	496	510	645	834
Unclassified	26	21	21	36	25
Post Bacc	344	295	301	327	212
Graduate	2,334	2,138	2,318	2,419	2,509
Medical	100	118	120	121	117
Second Degree	.	.	325	291	291
Total	12,552	12,397	13,129	13,687	13,648

### Spring 2017



### Spring UCF New Enrollment



Semester	Headcount				
Year	2013	2014	2015	2016	2017
Admit Type					
FTIC	307	345	412	479	442
FCS Transfer	2,947	3,062	3,193	3,201	3,139
Other Transfer	141	170	206	246	314
Unclassified	3	1	1	3	4
Post Bacc	213	239	246	202	240
Graduate	912	828	872	891	983
Second Degree	.	.	218	234	210
Total	4,523	4,645	5,148	5,256	5,332



[Click here to refresh collection.](#)



### SDES Dashboard - Fall Enrollment.srx

UCF level content - Fall Enrollment by Gender and Residency, by Ethnicity, and by College. Linked also with Undergrad, Graduate, and Medical level content reports



### SDES Dashboard - New Students.srx

University level content - New Students by Admit Type, by Gender, by Ethnicity, and by Semester. Linked also with Undergrad, Graduate, and Medical level content reports



### SDES Dashboard - FTIC Retention, Graduation, Progression.srx

First Time In College for 'Summer-Fall Full-Time', 'Summer-Fall All', and 'Fall Full-Time' cohorts. Retention, Graduation, and Progression reports, by Gender and by Ethnicity



### SDES Dashboard - FCS Transfer Retentn, Graduatn, Prgrssn.srx

FCS Transfer for 'Summer-Fall Full-Time', 'Summer-Fall All', and 'Fall Full-Time' cohorts. Retention, Graduation, and Progression reports, by Gender and by Ethnicity

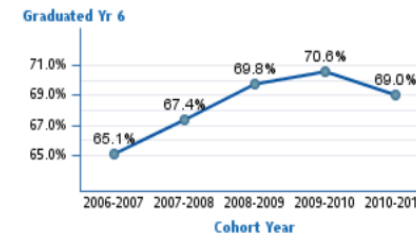


### SDES Dashboard - Other Transfer RGP.srx

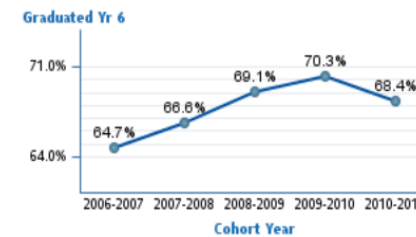
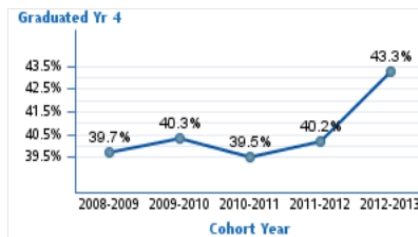
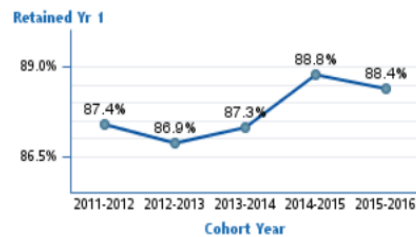
Other Transfer for 'Summer-Fall All' and 'Fall Full-Time' cohorts. Retention, Graduation, and Progression reports, by Gender and by Ethnicity



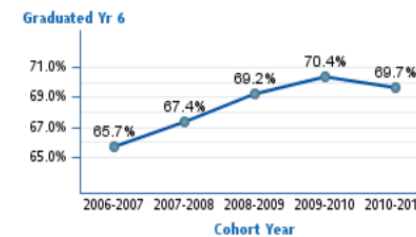
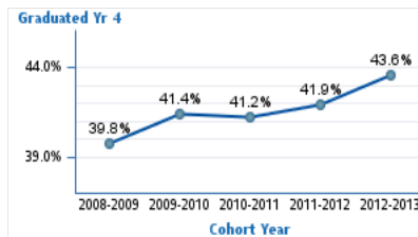
Summer-Fall Full-Time FTIC, 1st Year Retention, 4th and 6th Year Graduation Rates



Summer-Fall All FTIC, 1st Year Retention, 4th and 6th Year Graduation Rates



Fall Full-Time FTIC, 1st Year Retention, 4th and 6th Year Graduation Rates

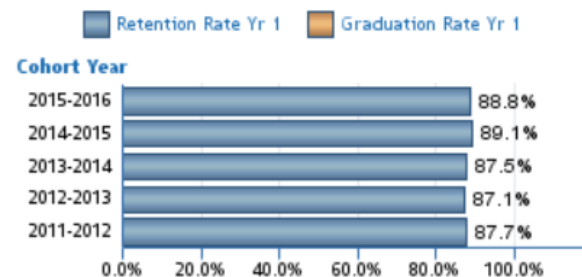


Source: Retention\_Fact. Summer-Fall Full-Time cohort used for the Performance Incentive Matrix, Summer-Fall All cohort used for the Annual Report, and Fall Full-Time cohort kept as historical record



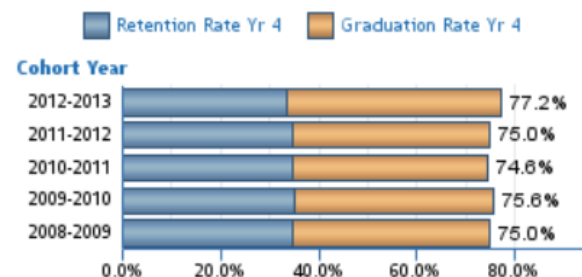


### Summer-Fall Full-Time FTIC, 1st Year Retention and Progression



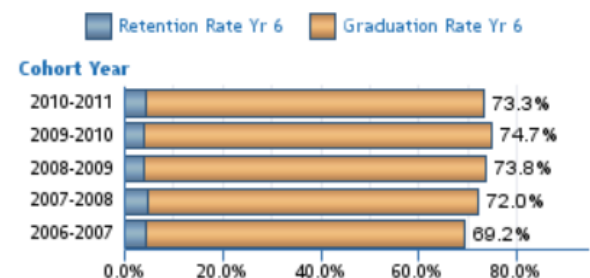
Cohort Year	Cohort Count	Retention Count Yr 1	Retention Rate Yr 1	Graduation Count Yr 1	Graduation Rate Yr 1	First Year Progression Count	First Year Progression Rate
2015-2016	6,294	5,589	88.8%	0	0.0%	5,589	88.8%
2014-2015	6,206	5,531	89.1%	0	0.0%	5,531	89.1%
2013-2014	5,815	5,088	87.5%	0	0.0%	5,088	87.5%
2012-2013	5,900	5,139	87.1%	0	0.0%	5,139	87.1%
2011-2012	6,138	5,386	87.7%	0	0.0%	5,386	87.7%

### Summer-Fall Full-Time FTIC, 4th Year Graduation and Progression



Cohort Year	Cohort Count	Retention Count Yr 4	Retention Rate Yr 4	Graduation Count Yr 4	Graduation Rate Yr 4	Fourth Year Progression Count	Fourth Year Progression Rate
2012-2013	5,900	1,982	33.6%	2,575	43.6%	4,557	77.2%
2011-2012	6,138	2,123	34.6%	2,480	40.4%	4,603	75.0%
2010-2011	6,007	2,076	34.6%	2,400	40.0%	4,476	74.5%
2009-2010	6,231	2,185	35.1%	2,525	40.5%	4,710	75.6%
2008-2009	6,133	2,132	34.8%	2,463	40.2%	4,595	74.9%

### Summer-Fall Full-Time FTIC, 6th Year Graduation and Progression



Cohort Year	Cohort Count	Retention Count Yr 6	Retention Rate Yr 6	Graduation Count Yr 6	Graduation Rate Yr 6	Sixth Year Progression Count	Sixth Year Progression Rate
2010-2011	6,007	256	4.3%	4,143	69.0%	4,399	73.2%
2009-2010	6,231	255	4.1%	4,399	70.6%	4,654	74.7%
2008-2009	6,133	246	4.0%	4,278	69.8%	4,524	73.8%
2007-2008	6,342	290	4.6%	4,272	67.4%	4,562	71.9%
2006-2007	6,377	264	4.1%	4,152	65.1%	4,416	69.2%



FTIC

Su-Fa FT RGP

Su-Fa All RGP

Fa FT RGP

Su-Fa FT RGdrEth

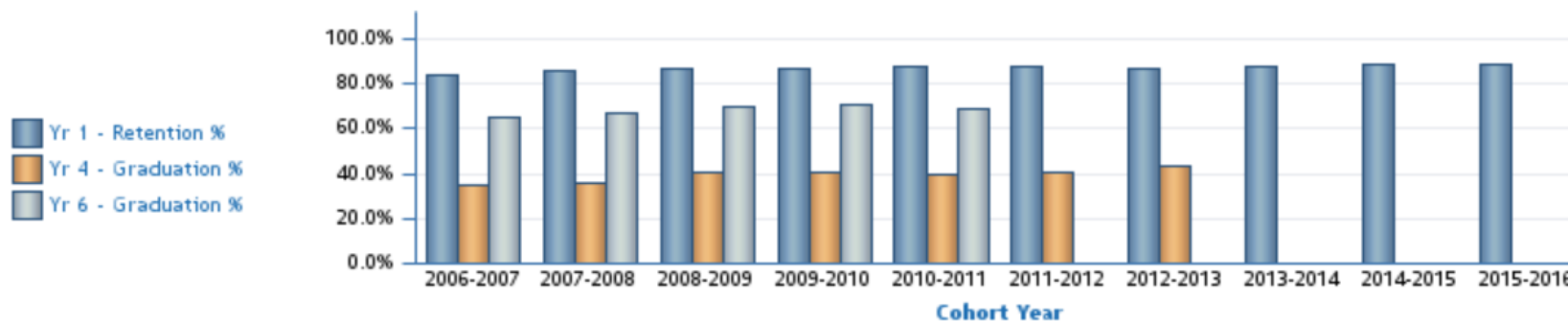
Su-Fa FT G4GdrEth

Su-Fa FT G6GdrEth

Su-Fa FT Eth

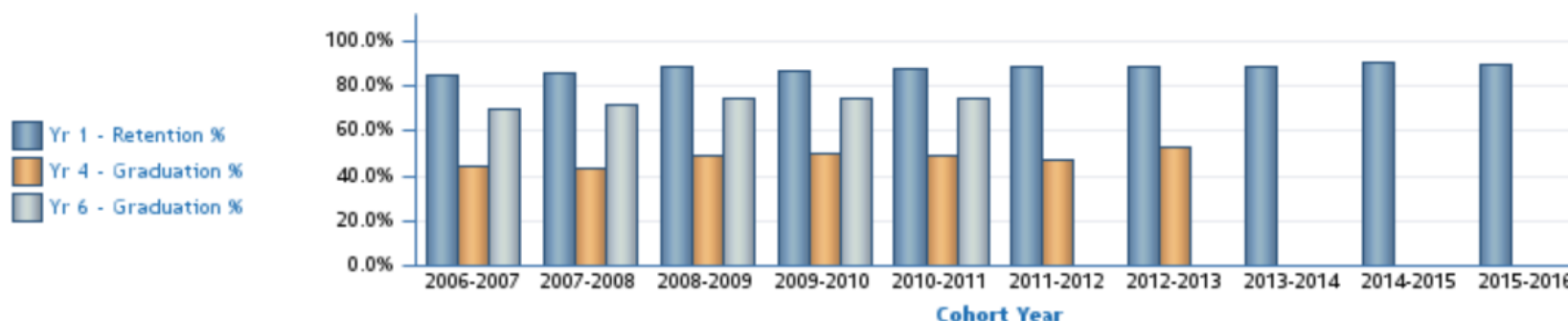
Su-Fa All Eth

Summer-Fall Full-Time FTIC, Male and Female, All Ethnic Groups



Cohort Year	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016
Cohort Count	6,377	6,342	6,133	6,231	6,007	6,138	5,900	5,815	6,206	6,294
Yr 1 - Retention %	83.9%	85.6%	87.1%	86.8%	87.3%	87.7%	87.1%	87.5%	89.1%	88.8%
Yr 4 - Graduation %	35.3%	35.9%	40.2%	40.5%	40.0%	40.4%	43.6%			
Yr 6 - Graduation %	65.1%	67.4%	69.8%	70.6%	69.0%					

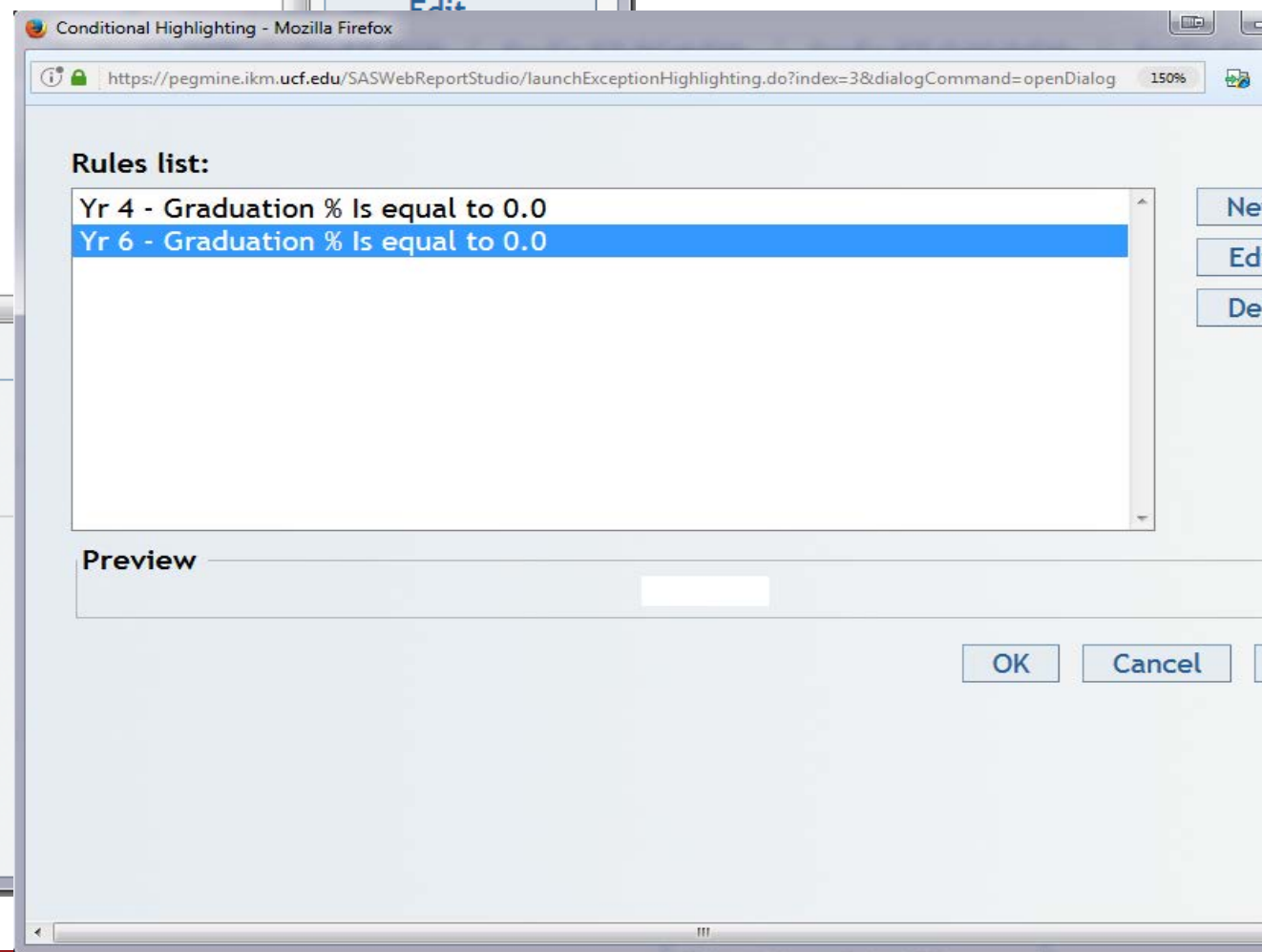
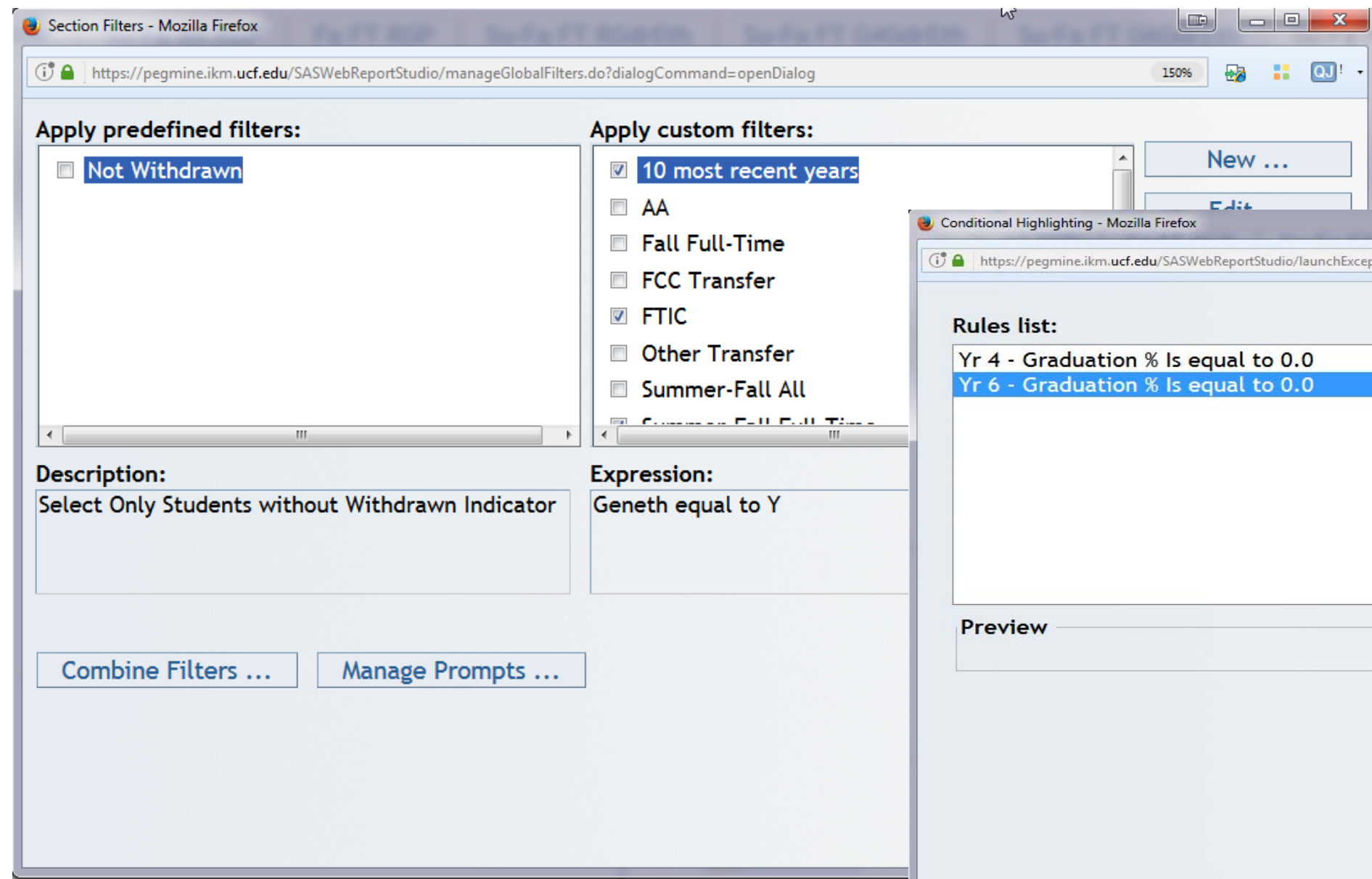
Summer-Fall Full-Time FTIC, Female, All Ethnic Groups



# External lookup table - maintenance

	⚠ CohortYear	⚠ RetainYr1	⚠ RetainYr2	⚠ GradYr4	⚠ GradYr5	⚠ GradYr6	⚠ GenEth	⚠ RetainAvgYr1	⚠ RetainAvgYr2	⚠ GradAvgYr4	⚠ GradAvgYr6
1	2005-2006										
2	2006-2007					Y	Y	Y	Y	Y	Y
3	2007-2008				Y	Y	Y	Y	Y	Y	Y
4	2008-2009			Y	Y	Y	Y	Y	Y	Y	Y
5	2009-2010			Y	Y	Y	Y	Y	Y	Y	Y
6	2010-2011		Y	Y	Y	Y	Y	Y	Y	Y	Y
7	2011-2012	Y	Y	Y	Y		Y	Y	Y	Y	Y
8	2012-2013	Y	Y	Y			Y	Y	Y	Y	
9	2013-2014	Y	Y				Y	Y	Y	Y	
10	2014-2015	Y	Y				Y	Y	Y		
11	2015-2016	Y					Y	Y			
12	2016-2017										
13	2017-2018										
14	2018-2019										
15	2019-2020										





# Performance

- Sections loading in less than 30 seconds
  - The most intensive section loads in approx. 20 to 30 seconds
  - The rest of sections load in 5 seconds or less



[Click here to refresh collection.](#)**SDES Dashboard Catalogs**

Semiannual SDES Dashboard Catalogs

## SDES Dashboard Catalogs

*Provided by Institutional Knowledge Management*

Bookmark

Publish

E-mail

### Semiannual SDES Dashboard Catalogs

Note: Catalog will open in a new browser window (PDF)

- + **2016-2017**
- **2015-2016**
  - July 2016 - Catalog**
  - July 2016 - Highlights**
  - 03 2016 - Highlights**
- + **2014-2015**
- + **2013-2014**
- + **2012-2013**
- + **2011-2012**
- + **2010-2011**



▼ SDES Dashboard Highlights -  
July 2016

▼ Fall Enrollment

▼ by Gender and  
Residency

UCF

UGRD

GRAD

MED

▼ by Ethnicity

UCF

UGRD

GRAD

MED

▼ by College

UCF

UGRD

GRAD

MED

▼ New Students

by Admit Type

FTIC

FCS Transfer

## SDES Dashboard Highlights

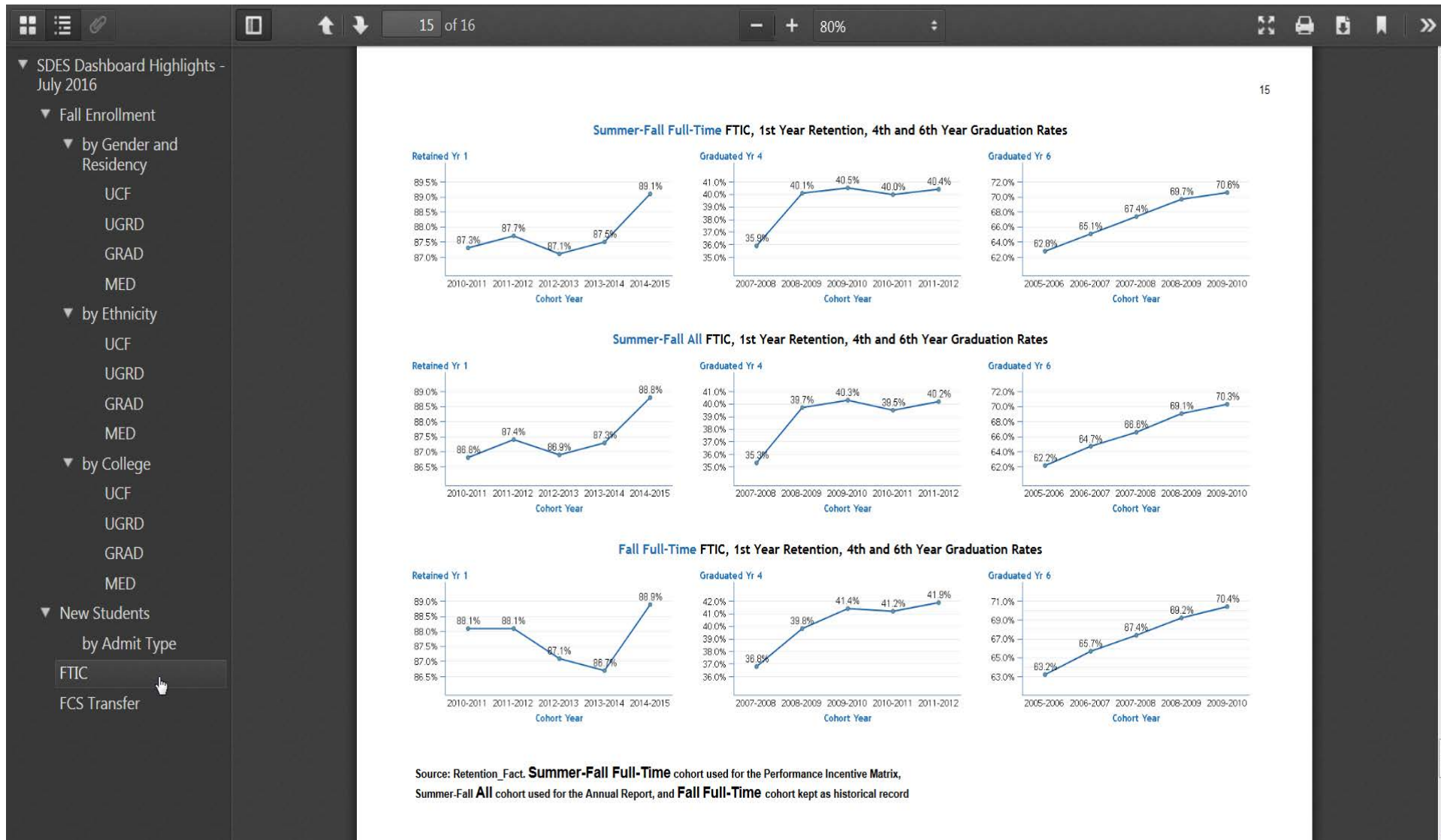


**University of Central Florida**

**July 2016**

Institutional Knowledge Management





# Conclusion

- Saved time and resources: from two months to a few hours in order to roll forward an academic year
- Able to provide consistent and reliable information: UCF official data
- Committed partnership between SDES and IKM
- More IKM partnerships after this successful flagship project



# Thank you! Questions?

**Carlos E. Piemonti, MBA**

Decision Support Developer  
Institutional Knowledge Management  
University of Central Florida

Carlos.Piemonti@ucf.edu  
**ucf.edu**

