ILLINET Interlibrary Loan Traffic Survey Analysis: FY2012-FY2016

Introduction

The CARLI Resource Sharing Committee's annual project for 2016-17 analyzes current trends related to interlibrary loan and resource sharing activities for returnable and non-returnable items in Illinois academic libraries. Since the Illinois State Library requires the annual submission of the ILLINET Interlibrary Loan Traffic Survey, the Committee sought to analyze requesting (borrowing) and supplying (lending) data from the past five years to see if there were any noticeable trends that would be of interest to academic libraries and CARLI member institutions in particular. It is hoped that this analysis will be useful for goal setting, resource allocation, planning for staffing, library policy review, collection justification, and peer institution benchmarking.

The Committee conducted a literature review and found that current literature on Illinois-specific resource sharing practices were not easy to come by, with an article by Wiley and Chrzastowski (2005) being the most relevant to our research. In the absence of sources relevant to our research project, we decided to focus on the data provided by academic libraries in Illinois on the ILLINET Interlibrary Loan Traffic Survey (Illinois State Library, 2012, 2013, 2014, 2015, 2016).

Methods

The raw data came from the ILLINET Interlibrary Loan Traffic Survey (Illinois State Library, 2012, 2013, 2014, 2015, 2016). This is a report that the Illinois State Library requires Illinois libraries of all types, including academic, to complete annually. The Survey summarizes the total number of interlibrary loan requests (both requesting and supplying) that libraries process annually, and it breaks them down into additional categories, such as returnables vs. non-returnables and in-state vs. out-of-state. Illinois libraries can search previous years' survey results after logging into Counting Opinions (the company that manages the data) on the State Library's website (Office of the Illinois Secretary of State).

As the data analysis below notes, the number of libraries submitting the ILLINET Interlibrary Loan Traffic Survey varied from year to year. Specifically, there was a large increase in the number of libraries submitting the survey in FY2015, as opposed to FY2014 and earlier. This was due to a decision by the Illinois State Library to encourage more libraries to complete the survey by linking it with Illinois State Library Certification. Before FY2015 submitting the survey had been a requirement with no penalty for noncompliance.

In order to provide a trend analysis of the data, we had to first identify the libraries that provided data for all five fiscal years. Raw data reports were downloaded from the Counting Opinions site that houses the ILLINET Interlibrary Loan Traffic Survey, and the data was deduplicated so data was provided only once for each institution (for some reporting years, individual library branches reported their statistics separately).
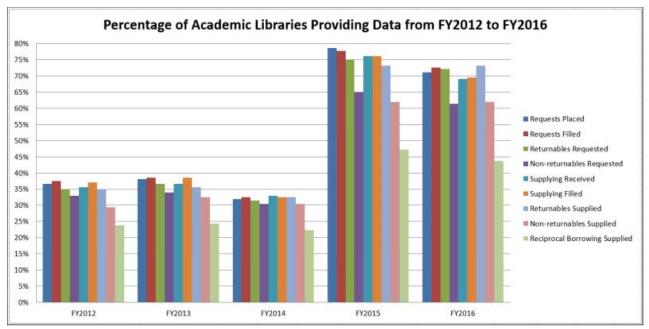
The data analysis is organized into two sections covering requesting (when a patron requests an item not owned by their home library), and supplying (when another library provides materials to a requesting library).

In recognizing the higher number of reporting institutions from FY2015 and FY2016, we also analyzed the same data in requesting and supplying, organized by the type of institution. We looked up the individual institutions included in the full report and assigned the institution type by the highest degree offered. The data is presented through line and bar graphs to visually demonstrate the trends in data, and a brief analysis is provided.

Data Analysis

Library Data Included in Analysis:

In order to conduct a trend analysis over several years, we included only academic libraries that reported data for all five years. Because the number of libraries submitting data increased from FY2012 to FY2016, with approximately twice the number of libraries submitting data in 2015/2016, we have also provided an analysis of interlibrary loan data for FY2015 and FY2016 organized by the type of institution. Based on the large jump in reporting from FY2014 to FY2015, it is evident that tying the completion of the ILLINET Interlibrary Loan Traffic Survey to the Illinois State Library Certification process was effective in encouraging more libraries to complete the survey, thus providing more complete data. (Figure 1)
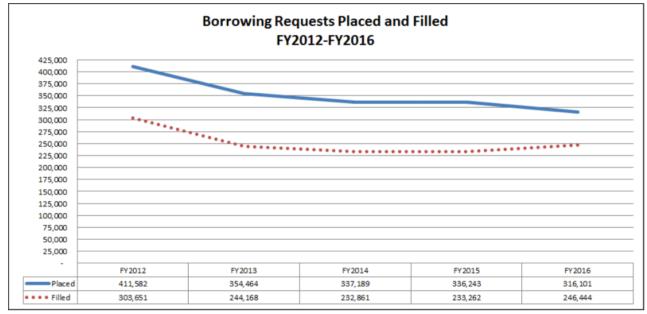
(Figure 1: Percentage of Academic Libraries Providing Data from FY2012 to FY2016)

Requesting (Borrowing):

From FY2012 to FY2016 there was a 23% decrease in the borrowing **requests placed** at the 44 academic libraries that submitted data for all 5 years. There was a 19% decrease in the borrowing **requests filled** at the 42 academic libraries that submitted data for all 5 years. (Figure 2)
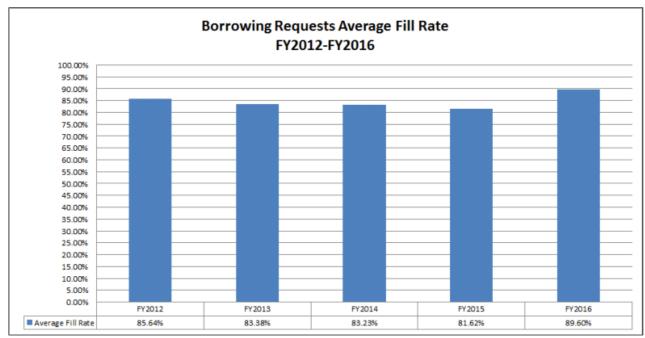
- Most notable is the significant decrease of 14% borrowing requests being placed from FY2012 to FY2013.
- From FY2013 through FY2016 the borrowing requests have remained relatively stable with an average decrease of 4% from year to year.
- From FY2015 to FY2016, despite a 6% decrease in the number of requests placed, the percentage of requests filled increased 5%.

(Figure 2: Borrowing Requests Placed and Filled FY2012-FY2016)

From FY2012 to FY2016 the average fill rate of the borrowing requests that were placed and filled by the 42 academic libraries that provided data for all 5 years remained stable within the 80% range. (Figure 3)

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- This chart shows the average of fill rates for each library, not the number of filled requests.
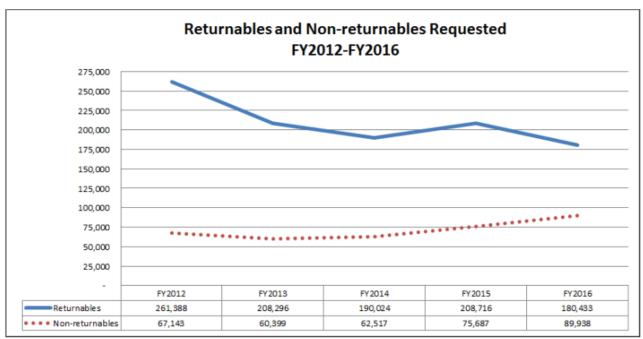- The majority of borrowing requests placed by patrons are filled.

(Figure 3: Borrowing Requests Average Fill Rate FY2012-FY2016)

For the ILLINET Interlibrary Loan Traffic Survey libraries report the number of physical items that their local patrons receive that must be returned to the owning library (returnables) and the number of electronic items received that do not need to be returned to the owning library (non-returnables).

From FY2012 to FY2016 there has been a 31% decrease in returnable items being borrowed, but there has been a 34% increase in number of non-returnables being borrowed. (Figure 4)

- While many think that interlibrary loan is primarily used for requesting electronic versions of articles not available in the collection, this data shows that despite the decrease in returnables being requested and the increase in non-returnables being requested, returnable items are still the most requested type of items by library patrons.

(Figure 4: Returnables and Non-returnables Requested FY2012-FY2016)

Because only 22% of academic libraries provided data for the borrowing requests placed and 21% provided data for the borrowing requests filled for all 5 years, we have also analyzed the borrowing request data for FY2015 and FY2016 to obtain a comparison by the type of institution. Institutions are grouped by the highest degree offered by the school.
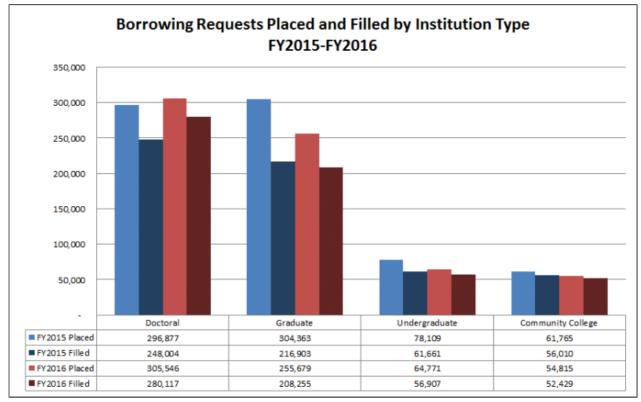
For FY2015 and FY2016 69% of libraries provided data for the number of borrowing requests placed, 71% of libraries provided data for the number of borrowing requests filled, and 65% of libraries provided data for the fill rate.

Number of Institutions Providing Data by Highest Degree Offered (FY2015-FY2016):

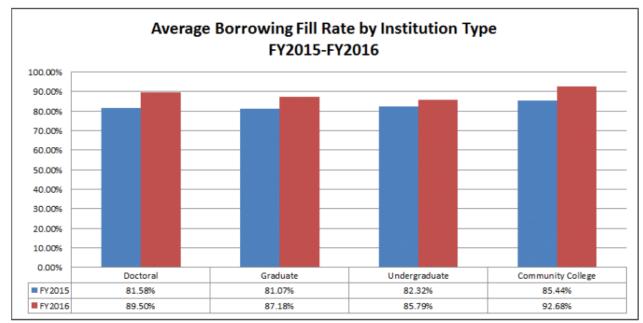| Institution Type	Placed	Filled	Fill Rate
Doctoral	21	21	20
Graduate	46	45	43
Undergraduate	23	23	22
Community College	46	50	44

The graph on the Borrowing Requests Placed and Filled by Institution Type shows that Doctoral and Master's granting institutions have the highest number of borrowing requests placed and filled of the four institution types. (Figure 5)

- This is reflective of the type of research conducted by patrons at institutions that grant doctoral and master's degrees that they would be more likely to require more specialized resources requiring requests to be filled via interlibrary loan.
- However, the data also shows that undergraduate and community college patron requests are more likely to be filled than the patron requests from doctoral and master's institutions.

Borrowing Requests Placed and Filled by Institution Type FY2015-FY2016

	Doctoral	Graduate	Undergraduate	Community College
FY2015 Placed	296,877	304,363	78,109	61,765
FY2015 Filled	248,004	216,903	61,661	56,010
FY2016 Placed	305,546	255,679	64,771	54,815
FY2016 Filled	280,117	208,255	56,907	52,429

(Figure 5: Borrowing Requests Placed and Filled by Institution Type FY2015-FY2016)

The average fill rate for patron requests from all institution types has increased from FY2015 to FY2016. This shows that fill rates for patron requests by institution type are also around the 80% range. (Figure 6)

(Figure 6: Average Borrowing Fill Rate by Institution Type FY2015-FY2016)

We also analyzed the returnable and non-returnable items that were borrowed by institution type.
Number of Institutions Providing Data for Returnables and Non-returnables Requested (FY2015-FY2016):

Institution Type	Returnables	Non-Returnables
Doctoral	21	21
Graduate	44	43
Undergraduate	21	18
Community College	45	33

This data also shows that patrons request and receive returnable items at a much higher amount than non-returnable items. This is consistent across all institution types. (Figure 7)

Returnables and Non-returnables Requested by Institution Type FY2015-FY2016

	Doctoral	Graduate	Undergraduate	Community College
FY2015 Returnables	197,456	150,010	44,405	46,311
FY2015 Non-returnables	91,338	68,739	17,744	4,370
FY2016 Returnables	179,199	138,584	40,021	45,457
FY2016 Non-returnables	100,918	69,509	16,858	3,217

(Figure 7: Returnables and Non-returnables Requested by Institution Type FY2015-FY2016)

Supplying (Lending):

From FY2012 to FY2016 there was a 15% decrease in the number of supplying requests placed as well as the number of supplying requests filled at the 42 libraries that submitted data for both supplying requests placed and filled for all five years. (Figure 8)

- Similar to borrowing requests, the most notable decrease was from FY2012 to FY2013 with a 14.19% decrease in supplying requests placed.
- The year to year average decrease for supplying requests placed for FY2013 to FY2016 was only 0.29%.

Supplying Requests Received and Filled
FY2012-FY2016

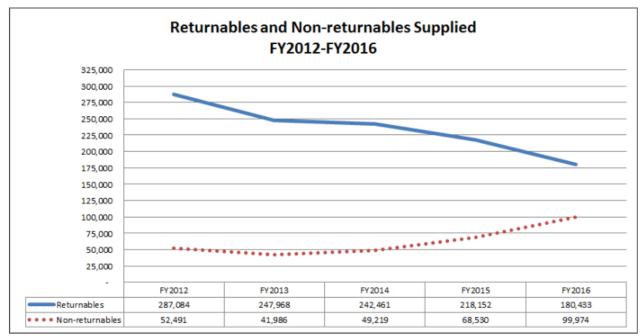|	FY2012	FY2013	FY2014	FY2015	FY2016
Received	424,134	363,930	362,265	362,089	360,770
Filled	333,554	268,515	302,143	297,024	283,016

(Figure 8: Supplying Requests Received and Filled FY2012-FY2016)

The average fill rate for supplying requests at the 40 academic libraries that provided data for all five years is around 75-85%, and has remained relatively stable for all five years. (Figure 9)

Supplying Requests Average Fill Rate
FY2012-FY2016

	FY2012	FY2013	FY2014	FY2015	FY2016
Average Fill Rate	75.50%	83.89%	77.50%	74.94%	77.50%

(Figure 9: Supplying Requests Average Fill Rate FY2012-FY2016)

From FY2012 to FY2016 there was a 37% decrease in returnables supplied at the 41 libraries that provided data for all five years. Conversely there was a 90% increase in non-returnable items supplied at the 36 libraries that provided data for all five years. (Figure 10)

Returnables and Non-returnables Supplied FY2012-FY2016

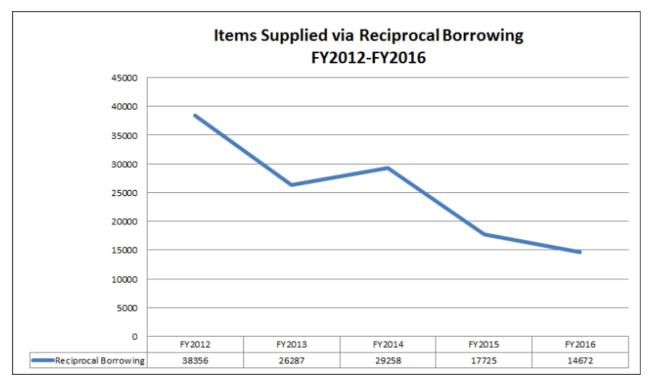|	FY2012	FY2013	FY2014	FY2015	FY2016
Returnables	287,084	247,968	242,461	218,152	180,433
Non-returnables	52,491	41,986	49,219	68,530	99,974

(Figure 10: Returnables and Non-returnables Supplied FY2012-FY2016)

"Items Supplied via Reciprocal Borrowing" refers to when a patron from a library in which there are shared borrowing privileges borrows an item on site at the lending library. This can apply to a patron from one I-Share library visiting another I-Share library and borrowing materials, or if the academic library has a reciprocal borrowing agreement with the local public library or non-I-Share library.

- Some libraries may have misinterpreted the meaning of reciprocal borrowing to refer to the lending of materials through resource sharing agreements and not as the on-site borrowing of materials by patrons from another library; as a result, the numbers reported for reciprocal borrowing may not be fully accurate.

From FY2012 to FY2016, items loaned via Reciprocal Borrowing from the 24 academic libraries that submitted data for all 5 years decreased by 62%. (Figure 11)
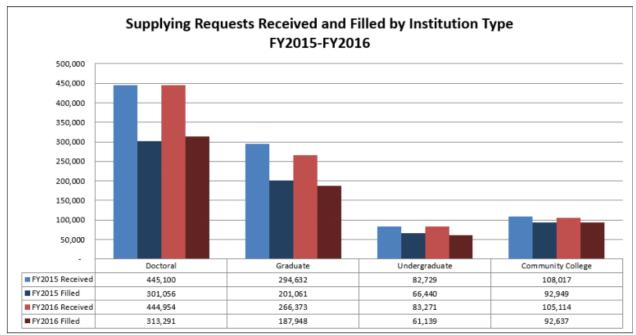
Items Supplied via Reciprocal Borrowing FY2012-FY2016

	FY2012	FY2013	FY2014	FY2015	FY2016
Reciprocal Borrowing	38356	26287	29258	17725	14672

Number of Institutions Providing Data by the Highest Degree Offered (FY2015-FY2016):

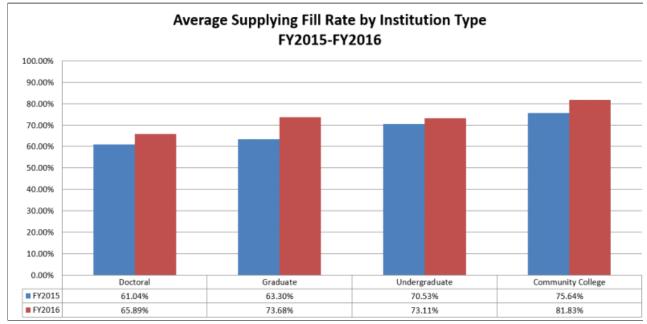| Institution Type	Placed	Filled	Fill Rate
Doctoral	20	20	19
Graduate	44	44	41
Undergraduate	21	21	20
Community College	46	49	45

Doctoral granting institutions received the highest number of lending requests. (Figure 12)

- This could be reflective of the type of collections held by doctoral granting institutions.
- Similar to the borrowing requests by institution type, the undergraduate and community college libraries had higher fill rates than doctoral and master's institutions.

Supplying Requests Received and Filled by Institution Type FY2015-FY2016

	Doctoral	Graduate	Undergraduate	Community College
FY2015 Received	445,100	294,632	82,729	108,017
FY2015 Filled	301,056	201,061	66,440	92,949
FY2016 Received	444,954	266,373	83,271	105,114
FY2016 Filled	313,291	187,948	61,139	92,637

(Figure 12: Supplying Requests Received and Filled by Institution Type FY2015-FY2016)

The average lending fill rate by institution type from FY2015-FY2016 range from around 60% to 80% depending on the institution type. Community college libraries have the highest average lending fill rate for both FY2015 and FY2016. (Figure 13)

Average Supplying Fill Rate by Institution Type FY2015-FY2016

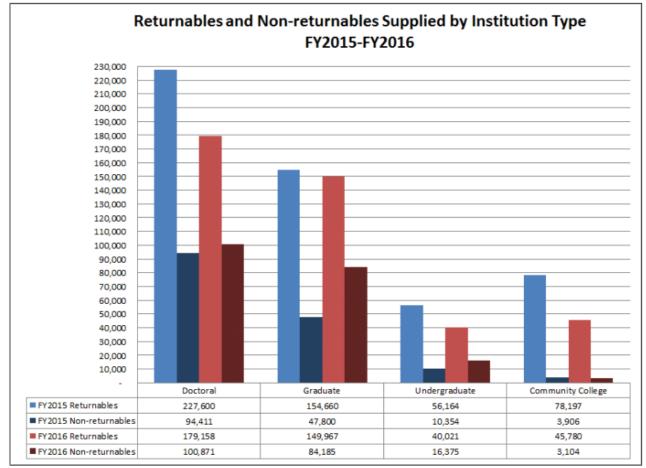|	Doctoral	Graduate	Undergraduate	Community College
FY2015	61.04%	63.30%	70.53%	75.64%
FY2016	65.89%	73.68%	73.11%	81.83%

(Figure 13: Average Supplying Fill Rate by Institution Type FY2015-FY2016)

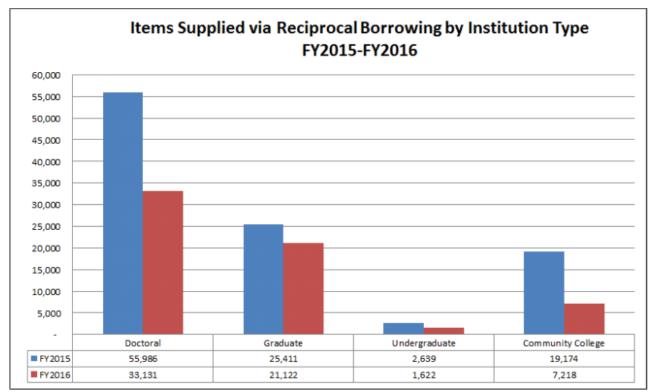Number of Libraries Providing Data on request type by Institution Type (FY2015-FY2016):

Institution Type	Returnables	Non-returnables	Reciprocal Borrowing
Doctoral	20	20	15
Graduate	44	45	25
Undergraduate	21	16	10
Community College	47	29	19

When looking at the type of items supplied by institution type from FY2015 and FY2016, it is clear that returnable items are the most supplied type of materials. However, the number of returnables supplied did decrease for all institution types from FY2015 to FY2016, and the number of non-returnable items supplied increased for all institution types except for community college libraries. (Figure 14)

Returnables and Non-returnables Supplied by Institution Type FY2015-FY2016

	Doctoral	Graduate	Undergraduate	Community College
■ FY2015 Returnables	227,600	154,660	56,164	78,197
■ FY2015 Non-returnables	94,411	47,800	10,354	3,906
■ FY2016 Returnables	179,158	149,967	40,021	45,780
■ FY2016 Non-returnables	100,871	84,185	16,375	3,104

(Figure 14: Returnables and Non-returnables Supplied by Institution Type FY2015-FY2016)

When viewing the "Items Supplied via Reciprocal Borrowing by Institution Type" there is a clear drop from FY2015 to FY2016 for all institution types. (Figure 15)

Items Supplied via Reciprocal Borrowing by Institution Type FY2015-FY2016

	Doctoral	Graduate	Undergraduate	Community College
FY2015	55,986	25,411	2,639	19,174
FY2016	33,131	21,122	1,622	7,218

(Figure 15: Items Supplied via Reciprocal Borrowing by Institution Type FY2015-FY2016)

Conclusion

We hope this analysis provides useful data to academic libraries and provides a snapshot of recent trends in resource sharing within Illinois. The data analysis does show that interlibrary loan requests, although declining, remain an inherent value to library services. The Committee feels this study is just a start for further data analysis.

Trends in the data encourage further investigation into these possible connections:

- Trends in campus enrollment
- Changes in patron resource needs
- Library space reorganization; print as smaller percentage of collection
- Faculty involvement in libraries/promotion of library resources
- Cost effectiveness of purchase vs. borrowing material
- The availability of open access content and full text databases
- Licensing options for e-content suppliers

The Committee would like to thank Gwen Harrison, Network Consultant at the State Library, for serving as a liaison between the Committee and Counting Opinions, especially for seeking assistance with technical issues that Committee members encountered while running reports on the data.

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