

## Goal 5. Continuous Improvement of the U.S. Education System:

**Enhance the education system’s ability to continuously improve through better and more widespread use of data, research and evaluation, evidence, transparency, innovation, and technology.**

**Goal Leader: Assistant Secretary, Office of Planning, Evaluation and Policy Development (OPEPD)**

**Objective 5.1: Data Systems and Transparency.** Facilitate the development of interoperable longitudinal data systems for early learning through employment to enable data-driven, transparent decision-making by increasing access to timely, reliable, and high-value data.

**Objective 5.2: Privacy.** Provide all education stakeholders, from early childhood to adult learning, with technical assistance and guidance to help them protect student privacy while effectively managing and using student information.

**Objective 5.3: Research, Evaluation, and Use of Evidence.** Invest in research and evaluation that builds evidence for education improvement; communicate findings effectively; and drive the use of evidence in decision-making by internal and external stakeholders.

**Objective 5.4: Technology and Innovation.** Accelerate the development and broad adoption of new, effective programs, processes, and strategies, including education technology.

### Public Benefit

Education stakeholders, ranging from students and parents, to teachers and principals, to institutional leaders and the Secretary, need access to timely, appropriate, relevant, and actionable information. Sources of helpful education information can range from datasets to rigorous evaluations and research studies to consumer-oriented tools. They must be accessible in multiple ways, relying on the use of technology and other dissemination strategies, while applying appropriate controls to protect student privacy. The Department must continue to invest in its information resources so that internal and external stakeholders can use the best available information to inform evidence-based decisions by states, districts, institutions of higher education, and students and parents.

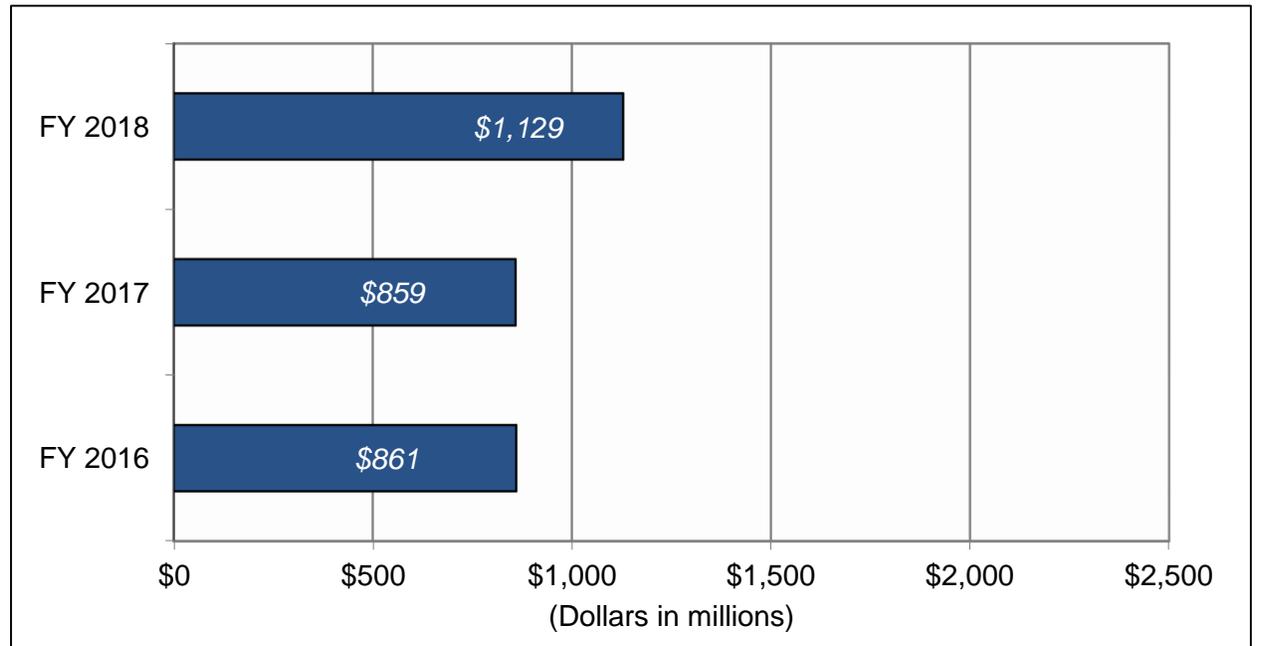
The Department continues to support states developing systems that will collect, manage, and appropriately report the valid, reliable data that are essential to achieving improvements across education, but there is much more work to do. In addition to supporting the development of the systems and structures that will provide education agencies across the nation with the data necessary to generate accurate information on student performance and other critical elements, the Department must continue to lead the national discussion of how these systems are best and most appropriately used to support students, improve instruction, address inequities in access and success, develop future teachers, and inform practice.

Additionally, the Department must help ensure that states, districts, and institutions of higher education are using and sharing data in ways that meet the highest standards of data ethics and protect student privacy, including compliance with applicable privacy laws. The collection, storage, maintenance, and use of data must be responsible and must appropriately protect student privacy. Stewards and users of data must remember that these data describe real people and ensure that systems protect the rights of those people. Student privacy is now a

focal point across the country; over the past three years, a majority of states have enacted student privacy legislation, while also expanding data use.

Better use of information, for policymakers, educators, institutional leaders, and students and parents, depends on information being accessible through reliable technology in formats that are helpful to various users. Data on students’ educational and related financial outcomes will enable accountability for institutions and help to support students in their educational and career pathways. Additionally, the Department strives to provide public access to its own data by sharing it in various formats appropriate for data novices, reporters, researchers, and developers. In addition, the What Works Clearinghouse (WWC) provides user-friendly syntheses of research evidence on various approaches and strategies in ways that are designed to be helpful to decision-makers. Taken together, these activities support the effort to help ensure that scarce dollars have their intended impact and empower states, districts, and institutions of higher education to become more dynamic learning organizations, especially in areas with little existing rigorous evidence.

**Goal 5 Discretionary Resources**



**Major Discretionary Programs and Activities<sup>72</sup> Supporting Goal 5 Performance Metrics [Dollars in Millions]**

POC	Account	Obj.	Program	FY 2016 Appropriation	FY 2017 Annualized CR <sup>73</sup>	FY 2018 President's Budget
IES	IES	5.3	National assessment	149	149	149
IES	IES	5.3	Regional educational laboratories	54	54	54

<sup>72</sup> All the programs listed are discretionary programs, as distinct from mandatory programs. These include both competitive and noncompetitive/formula programs.

<sup>73</sup> A full-year 2017 appropriation was not enacted at the time the FY 2018 Budget was prepared; therefore, the Budget is built off of the *Further Continuing Appropriations Act, 2017* (P.L. 114–254). The amounts included for 2017 reflect the annualized level provided by the continuing resolution.

POC	Account	Obj.	Program	FY 2016 Appropriation	FY 2017 Annualized CR <sup>73</sup>	FY 2018 President's Budget
IES	IES	5.3	Research in special education	54	54	54
IES	IES	5.3	Research, development, and dissemination	195	195	195
IES	IES	5.1, 5.2	Statewide longitudinal data systems	35	34	34
IES	IES	5.3	Statistics	112	112	112
OII	I&I	5.3	Education innovation and research <sup>74</sup>	120	120	370
<b>Subtotal</b>				<b>719</b>	<b>718</b>	<b>968</b>
<b>Other Discretionary Programs/Activities</b>				<b>142</b>	<b>141</b>	<b>161</b>
<b>TOTAL, GOAL 5</b>				<b>861</b>	<b>859</b>	<b>1,129</b>

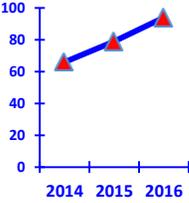
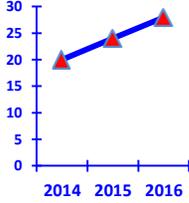
POC = Principal Operating Component.

CR = Continuing Resolution.

NOTES: Many programs may have sub-activities that relate to other goals. Detail may not add to total due to rounding.

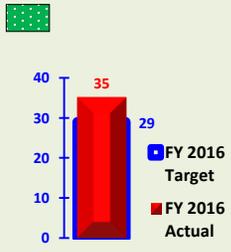
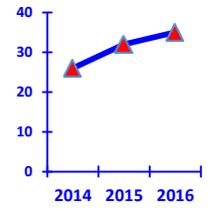
<sup>74</sup> This program was titled "Investing in Innovation" in 2016.

**Goal 5: Details**

Continuous Improvement of the U.S. Education System Indicators of Success Indicator Measurement Direction	Baseline	Actuals			Current Year Target	Current Year Results	Actual-to-Target 2016		Out-Year Targets		Trend Line (Actuals)
		2014	2015	2016	2016	2016	Missed <sup>75</sup>	Exceeded <sup>76</sup>	2017	2018	
5.1.A. Number of public data sets included in ED Data Inventory and thus linked to Data.gov or ED.gov websites  INCREASE 	FY: 2013 55	FY: 2014 66	FY: 2015 79	FY: 2016 94	FY: 2016 94	MET			104	110	
5.1.B. Number of states linking K-12 and postsecondary data with workforce data  INCREASE 	FY: 2013 12	FY: 2014 20	FY: 2015 24	FY: 2016 28	FY: 2016 25	MET			25	28	

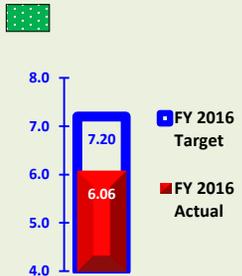
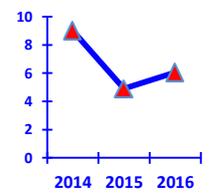
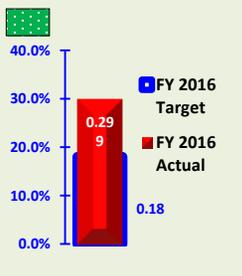
<sup>75</sup> Missed target by <=1, or if percentage, <=1.3 percentage points.

<sup>76</sup> Surpassed target; not just met the target. If a diminishing target, the actual was below the reduction target set.

Continuous Improvement of the U.S. Education System Indicators of Success Indicator Measurement Direction	Baseline	Actuals			Current Year Target	Current Year Results	Actual-to-Target 2016		Out-Year Targets		Trend Line (Actuals)
		2014	2015	2016	2016	2016	Missed <sup>75</sup>	Exceeded <sup>76</sup>	2017	2018	
<b>5.1.C. Number of states linking K–12 with early childhood data<sup>77</sup></b>  <b>INCREASE</b> 	FY: 2013 19	FY: 2014 26	FY: 2015 32	FY: 2016 35	FY: 2016 29	MET			NA	NA	
<b>New Metric: Number of states actively using data systems to support and inform improvements</b>	FY: 2012 7	18	28	32	NA	NA	NA		26 <sup>78</sup>	35	NA

<sup>77</sup> Retiring metric at conclusion of FY 2016. Please see appendix B for additional information pertaining to the metric’s retirement. The FY 2017 and 2018 targets were 32 and 33, respectively. If a new metric is being proposed, the new metric will be directly below the indicator measurement direction of the metric being retired.

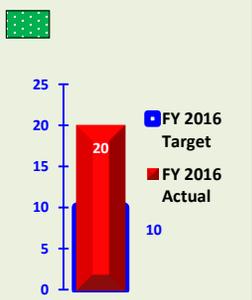
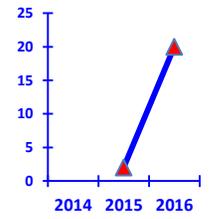
<sup>78</sup> Currently finalizing approval from OMB to implement survey of all states on data system capabilities and uses. The appropriate time to revisit FY 2017 and 2018 targets will be in quarter 4 of FY 2017 once the Department has the initial data from that survey.

Continuous Improvement of the U.S. Education System Indicators of Success Indicator Measurement Direction	Baseline	Actuals			Current Year Target	Current Year Results	Actual-to-Target 2016		Out-Year Targets		Trend Line (Actuals)
		2014	2015	2016	2016	2016	Missed <sup>75</sup>	Exceeded <sup>76</sup>	2017	2018	
<p><b>5.2.A. Average time to close "cases" (PTAC + FPCO)</b></p> <p style="text-align: center;"><b>DECREASE</b></p> 	FY: 2013 10 days	FY: 2014 9 days	FY: 2015 4.9 days	FY: 2016 6.06 days	<b>FY: 2016 7.2 days</b>	<b>MET</b>			6.709 <sup>79</sup>	10.0	
<p><b>5.3.A. Percentage of select new (noncontinuation) competitive grant dollars that reward evidence<sup>80</sup></b></p> <p style="text-align: center;"><b>INCREASE</b></p> 	FY: 2012 6.5%	FY: 2014 15.9%	FY: 2015 29.4%	FY: 2016 29.9%	<b>FY: 2016 18.0%</b>	<b>MET</b>			20.0%	30.0%	

<sup>79</sup> Target was updated to reflect the goal of a 10% reduction from the prior year in the 2015 APR (FY 2017 target was an average of 6.48 days). However, the target has since been revised to be less aggressive due to internal staffing shifts, but still represents a ½ day improvement from the FY 2016 target.

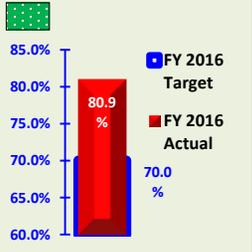
<sup>80</sup> Metric is aligned to an Agency Priority Goal. This metric's FY 2016 actual excludes Striving Readers. Even without that data, the metric's target has been met.

Continuous Improvement of the U.S. Education System Indicators of Success Indicator Measurement Direction	Baseline	Actuals			Current Year Target	Current Year Results	Actual-to-Target 2016		Out-Year Targets		Trend Line (Actuals)
		2014	2015	2016	2016	2016	Missed <sup>75</sup>	Exceeded <sup>76</sup>	2017	2018	
5.3.B. Number of peer-reviewed, full-text resources in the Education Resources Information Center (ERIC)	FY: 2013 23,512	FY: 2014 27,292	FY: 2015 36,197	FY: 2016 47,573	FY: 2016 35,692	MET	<p>Legend:   <span style="color: blue;">■</span> FY 2016 Target  <span style="color: red;">■</span> FY 2016 Actual</p>		40,892	46,892	
INCREASE ↑											
5.3.C. Number of visits to the What Works Clearinghouse (WWC) website	FY: 2015 1,822,000	NA	FY: 2015 1,822,000	FY: 2016 3,756,724	FY: 2016 1,967,760	MET	<p>Legend:   <span style="color: blue;">■</span> FY 2016 Target  <span style="color: red;">■</span> FY 2016 Actual</p>		2,164,536	2,380,989	
INCREASE ↑											

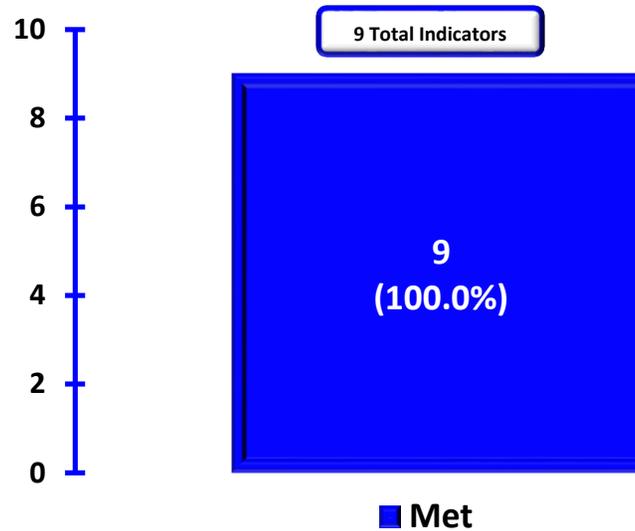
Continuous Improvement of the U.S. Education System Indicators of Success <b>Indicator Measurement Direction</b>	Baseline	Actuals			Current Year Target	Current Year Results	Actual-to-Target 2016		Out-Year Targets		Trend Line (Actuals)
		2014	2015	2016	2016	2016	Missed <sup>75</sup>	Exceeded <sup>76</sup>	2017	2018	
<p>5.3.D. Number of completed project evaluations from grantees from select discretionary grant programs in a given fiscal year that meet What Works Clearinghouse (WWC) Evidence Standards<sup>81</sup></p> <p style="text-align: center;"><b>INCREASE</b> </p>	FY: 2015 2	NA	FY: 2015 2	FY: 2016 20	FY: 2016 10	<b>MET</b>			10 <sup>82</sup>	30	

<sup>81</sup> Metric is aligned to an Agency Priority Goal (APG).

<sup>82</sup> The FY 2017 target has been revised to reflect a target of 10 versus 20. The APG statement notes that by 9/30/2017 there will 20 completed project evaluations. FY 2016's target was 10 and FY 2017's target is also 10, equating to a target of 20 for the two-year APG.

Continuous Improvement of the U.S. Education System Indicators of Success Indicator Measurement Direction	Baseline	Actuals			Current Year Target	Current Year Results	Actual-to-Target 2016		Out-Year Targets		Trend Line (Actuals)
		2014	2015	2016	2016	2016	Missed <sup>75</sup>	Exceeded <sup>76</sup>	2017	2018	
5.4.A. Percentage of schools in the country that have actual Internet bandwidth speeds of at least 100 Mbps  <b>INCREASE</b> 	FY: 2013 20.0%	41.0%	55.0%	80.9%	<b>70.0%</b>	<b>MET</b>			80.0%	90.0%	

### Goal 5 FY 2016 Indicator Performance Summary



NA = Not applicable.

TBD = To be determined.

Academic Year (AY) is a collegiate year spanning August–May; School Year (SY) spans August–July and is aligned with a P–12 school year; Fiscal Year (FY) corresponds to a federal fiscal year; Calendar Year (CY) spans January–December.

Data Sources and Frequency of Collection:

- 5.1.A. Data Strategy Team Data Inventory and the public ED Data Inventory at <http://datainventory.ed.gov>; quarterly
- 5.1.B. State Longitudinal Data Systems (SLDS) grant monitoring (monthly updates from states, annual performance reports, final performance reports, and site visits); quarterly
- 5.1.C. SLDS grant monitoring (monthly updates from states, annual performance reports, final performance reports, and site visits); quarterly
- 5.2.A. Case Tracking System (CTS) Monthly Metric Reports; quarterly
- 5.3.A. Forecast Report issued by the Office of the Chief Financial Officer (OCFO) and final Funding Reports from relevant programs; annually
- 5.3.B. Education Resources Information Center (ERIC); quarterly
- 5.3.C. What Works Clearinghouse (WWC) website analytics provided monthly by the WWC website contractor; quarterly
- 5.3.D. Discretionary grant slate memoranda, discretionary grant financial forecasts and reports from OCFO, and the What Works Clearinghouse; quarterly
- 5.4.A. Education Superhighway (for baseline), Consortium for School Networking (CoSN)/AASA (American Association of School Administrators today known as AASA, The School Superintendents Association) E-rate Infrastructure Survey; annually

**Note on performance metrics and targets:** These metrics were established as a part of the *FY 2014–18 Strategic Plan*. Metrics may be updated or revised to reflect awareness of more accurate data or clarifications. Such updates or revisions are identified in footnotes.

## Analysis and Next Steps by Objective

**Objective 5.1: Data Systems and Transparency.** *Facilitate the development of interoperable longitudinal data systems for early learning through employment to enable data-driven, transparent decision making by increasing access to timely, reliable, and high-value data.*

### *FY 2016 Implementation Strategy*

The primary implementation strategies regarding data systems and transparency for FY 2016 were centered on three goals:

- ensure a successful first year for the 16 SLDS grantees from the FY 2015 round,
- connect internal transparency efforts to the new InformED initiative, and
- improve the tools and support services available to the public for adoption of the CEDS.

With the new SLDS grantees, the Department looked at grant areas that created problems in previous grants and aligned support as appropriate when setting up grant monitoring plans for this round of grantees. In addition to establishing clear grant implementation plans and monitoring schedules with each FY 2015 grantee, the SLDS team delivered 15 topical webinars and released 9 new publications on traditionally challenging topics, including data system sustainability, effectively linking education and workforce records, and successfully supporting a research agenda. These developed resources are available for all states, not just grantee states, through the [SLDS program website](#).

Within the Department, the InformED initiative was launched during FY 2016. InformED seeks to develop a world-class open data infrastructure at the Department, focusing on improved data releases and internal data dissemination procedures. One of the important FY 2016 accomplishments was to improve the [Department's data landing page](#), including enabling visitors to search data resources by topic and keywords. By the end of the year, the InformED activities continued to expand to encompass a study of aligning key words in the Data Inventory with the organizational structure used on the new landing page, thereby aligning existing Goal 5 metrics with InformED activities.

FY 2016 began with the installation of a new support team for the CEDS. The team analyzed public feedback and website usage to inform their decision to place a high priority on reorganizing the tools and resources on the CEDS webpage. This strategy resulted in the deployment of a [Mapping Toolkit](#) on the website before the end of the fiscal year.

### *FY 2016 Barriers to Success*

There are three key barriers that could affect progress on this strategic objective:

1) The Department may not have the human capital and financial resources needed to support the information technology (IT) infrastructure and procedural changes required to continue to advance its open data and transparency efforts.

2) The lower number of active SLDS grantees (as FY 2012 grants close out) could lead to program data not accurately representing the state of the nation as a whole.

3) Focus on other online resources could result in less traffic to [education.data.gov](http://education.data.gov), which could make it more difficult to track usage statistics and improve the sites accordingly and may require redefining success in terms of web traffic.

### **Key Milestones and Future Actions**

The Department reached a number of key milestones, including:

- launching CEDS Mapping Toolkit;
- establishing grant implementation plans for all 16 FY 2015 SLDS grantees;
- deploying resources and technical assistance to FY 2015 SLDS grantees, and making additional opportunities available to all states; and
- adding information on 16 public datasets to the ED Data Inventory, and through the Department's `data.json` file to the repository at [data.gov](http://data.gov).

In FY 2017, the Department engaged a [network of state Chief Information Officers \(CIOs\) organized by Chief State School Officers \(CSSOs\)](#) at their fall meeting about explicit actions they would be willing to take in support of CEDS. There was consensus among the members in attendance at the fall meeting that strong messaging to establish CEDS as the standard listing of elements, definitions, and relationships upon which they rely was needed. In addition to that messaging, the network of CIOs of CSSOs is drafting a set of “action steps” that member states can choose to implement.

The SLDS program team spent much of FY 2016 preparing a new data collection proposal to enable gathering information on data system and transparency capability from all states, not just grantee states.

**Objective 5.2: Privacy. *Provide all education stakeholders, from early childhood to adult learning, with technical assistance and guidance to help them protect student privacy while effectively managing and using student information.***

### **FY 2016 Implementation Strategy**

The past several years have seen significant activity on student privacy issues. News stories abound about data collection in schools from emerging technologies, and the majority of states have passed student privacy legislation. Various federal student privacy statutes were introduced as well, though none of them were enacted. Resources devoted to student privacy increased in FY 2016, with five new full-time equivalents being added to these operations, and with the introduction of privacy “Fellows” in the Office of the Chief Privacy Officer. These new resources have enabled the Department to continue to meet the growing cry for technical assistance on privacy matters. The addition of these new resources, and a desire to focus on policy development and enforcement, prompted the Department to reorganize its student privacy functions, effective January 8, 2017. Two divisions have been created under the Chief Privacy Officer. The Family Policy Compliance Office (FPCO) will continue with its traditional function of investigating and responding to complaints from parents and eligible students, as well as providing technical assistance to school officials related to those complaints. A new division, the Student Privacy Policy and Assistance Division (SPPAD), will lead efforts to develop Departmental policy and coordinate technical assistance.

The Department continues to refine the efficiency of its technical assistance delivery through use of metric management, relying on a case tracking system that manages workload and

content for both contractor and Department staff. These gains were further expanded during implementation of the restructured Privacy and Technical Assistance Center (PTAC) contract during the first quarter of the fiscal year, which increased contractor resource utilization by housing the helpdesk function within headquarters.

Throughout the fiscal year, the Department made progress reducing turnaround time for cases and providing targeted technical assistance. Reducing the backlog of complaints and inquiries required devising and implementing a new approach in assigning and tracking cases. In addition, the Department completed a comprehensive review of the data in the tracking system, and worked to address a data entry delay uncovered during third-quarter reporting regarding average age of open “correspondence and complaints” and quality control for closing cases.

### ***FY 2016 Barriers to Success***

The Department faces two primary barriers to success:

- While the Department made progress on policy development in FY 2016, significant work is still required to answer emerging and longstanding policy questions on privacy topics related to video recording, e-mails, and permissible use.
- The Department’s student privacy caseload continues to increase, as does the complaint backlog in FPCO. Process improvements and expanded proactive technical assistance helped to mitigate the impact of this growth, but the sharp increase in new complaints resulted in a modest increase in the complaint backlog of 21 percent over the same timeframe. While the new resources and reorganization should help, limited resources present a challenge to support student privacy technical assistance and enforcement activities.

### ***Key Milestones and Future Actions***

During FY 2016 and in prior fiscal years, the Department demonstrated expected progress on the metrics related to technical assistance delivery. Turnaround time for cases averaged only 6.06 days, exceeding the goal of less than 7.2 days by more than a day. Proactive technical assistance goals were achieved through site visits, presentations, webinars, and regional meetings. To focus efforts on improving response time, and as noted in the FY 2015 APR, the metric regarding “average time to close correspondence and complaints” was retired and replaced with the “average age of correspondence and complaints.”

In achieving the metric goals, the Department accomplished several additional milestones. In FY 2015, the Department responded to public and Congressional criticism over the privacy of students’ medical treatment records in the wake of a recent sexual assault case by issuing a draft Dear Colleague Letter to obtain public input on the protection of student privacy in campus medical records. After extensive collaboration not only across the Department, but also with partners in HHS, in FY 2016, the Department released and was publicly commended for the [final version of this important Dear Colleague Letter](#).

Another significant accomplishment was the Department’s collaboration with DOL in providing needed [guidance to state agencies, educational agencies and institutions, and service providers on performance reporting and evaluation requirements under WIOA](#).

In addition to these formal guidance documents, the Department also offered technical assistance through a variety of [short, informative videos](#) targeting both school personnel and parents.

**Objective 5.3: Research, Evaluation, and Use of Evidence. *Invest in research and evaluation that builds evidence for education improvement; communicate findings effectively; and drive the use of evidence in decision making by internal and external stakeholders.***

### ***FY 2016 Implementation Strategy***

In FY 2016, the Evidence Planning Group (EPG), which consists of representatives from OII, IES, and OPEPD, followed a similar implementation strategy to that of past years. Prior to the start of FY 2016, EPG met with various programs to discuss whether it would be appropriate to move toward an evidence-based model in their competitions. In the first quarter of FY 2016, programs worked with EPG to finalize their plans for using evidence once funding levels became certain. In addition, EPG began to review the ESSA carefully to determine which programs would be the best candidates for evidence, as well as how the Department's current evidence definitions are aligned with the ESSA's "evidence-based" definition, which appears in several programs. In the fourth quarter of FY 2016, the Department [released guidance](#) for states and districts that suggests steps for effective decision-making using evidence and recommends criteria and considerations for each of the four levels of evidence in the ESSA. Additionally, the Department's Office of Educational Technology (OET), in partnership with IES, contracted Mathematica Policy Research and SRI International to build an online platform called the Ed Tech Rapid Cycle Evaluation (RCE) Coach to support school and district leaders to collect more evidence when making decisions about educational technologies. The need for evidence-based decision-making found in the ESSA prompted this work, and the platform is now available and free for educators to use.

The Department exceeded the FY 2016 target for number of peer-reviewed, full-text resources in the Education Resources Information Center (ERIC). In the first quarter, ERIC completed a new source selection round and approved new sources to be in ERIC. In addition, IES engaged the i3 program to encourage its grantees to submit the studies from their project evaluations to ERIC, achieving two important goals for the i3 program: (1) ensuring that all studies from the i3 program are publicly available and (2) ensuring that studies are made available for WWC review in a systematic way.

In FY 2016, the Department exceeded the planned target for number of reviewed studies in the WWC database. In the first quarter, to continue to increase the number of visitors to the WWC website, the WWC continued to expand the database of reviewed studies through reviews conducted for WWC products (e.g., intervention reports, practice guides, single study reviews, and quick reviews). Studies submitted as part of a grant application for the Department's evidence-based grant competitions were also a source of evidence reviewed by the WWC. During the first quarter, the WWC reviewed studies for grant competitions and publicized the use of its study findings dataset, which is a resource that reports all available data for studies that meet standards and either have a WWC report or were reviewed for a grant competition. In addition, in the fourth quarter of FY 2016, the WWC released a redesigned "Find What Works" tool that allows users to search for studies by topic area, such as math or science, to find studies where there is evidence of positive effects. The "Students Like Yours" feature of this tool also allows users to specify characteristics of their students to better identify what research has been conducted on similar populations. This resource continues to be widely used among the research community. To ensure success for this metric, IES continually collaborated with staff from OII, the Office of Postsecondary Education (OPE), and OELA to coordinate evidence reviews for evidence-based competitions.

In FY 2016, the Department exceeded the target for number of completed project evaluations from grantees of select discretionary grant programs that meet WWC evidence standards. The main implementation strategy for this indicator involved checking the WWC database of reviewed studies to determine whether any new studies from Department-funded competitive grants were in the database and met WWC standards. Bolstering performance for this metric is the Department's understanding that effective technical assistance is necessary to ensure grantees tasked with conducting rigorous evaluations of their projects stay on track.

### *FY 2016 Barriers to Success*

The EPG continues to consider whether the current approach to this work is sustainable. Based on lessons learned, the Department has determined that focus must be strategic so that the use of evidence is in select programs rather than continuing to scale at the current rate. With limited resources, it is crucial that the Department focus on high-quality work in programs where using evidence is most likely to be impactful, as opposed to putting evidence priorities in every competitive program without strong fidelity of implementation.

It is important to note that these efforts are also complemented by the work of the Department's Comprehensive Centers and Regional Educational Laboratories, which are designed to provide high-quality resources to the field.

While the Department surpassed its target for the number of studies conducted as part of a discretionary grant-funded project that are determined to meet WWC evidence standards in FY 2016, this work may not be sustainable. One lesson from the i3 program is that, even when employing very sophisticated evaluators, substantial technical assistance from the Department is essential in order to keep the project evaluations on track to meet rigorous standards. While most discretionary grant programs do not have the resource flexibility to focus on rigorous evaluation standards, EPG has worked to create a contracting option for programs that need help with evaluation expertise, with a few programs entering into that contract for FY 2016.

### *Key Milestones and Future Actions*

Looking forward to FY 2017, the Department continues to consider ways to streamline and improve upon its evidence review process for discretionary grant competitions.

To increase the number of visits to the WWC website in FY 2017, the Department will continue to expand social media presence, point competitive grant applicants to the WWC website, and produce products like intervention reports, quick reviews, single study reviews, and practice guides.

**Objective 5.4: Technology and Innovation. *Accelerate the development and broad adoption of new, effective programs, processes, and strategies, including education technology.***

### *FY 2016 Implementation Strategy*

The Department's many successes during FY 2016 include expanded technical support and assistance to support state and district leaders across the country working to improve teaching and learning through the effective use of technology. Over [25 states and the District of Columbia](#) have joined the effort and committed to supporting district leadership teams in planning for digital learning. In addition, 3,000 superintendents from across the country have committed to foster and lead a culture of digital learning in their districts by signing the [Future Ready District Pledge](#). The Department, in partnership with the Alliance for Excellent Education

and with support from a [coalition of over 50 national and regional partners](#), supports district leaders with specific tools and guidance to plan and implement personalized, research-based digital learning strategies in order to prepare students for success in college, career, and citizenship.

To support the work of the superintendents, OET continued to collect examples of best practices for connecting schools, providing devices, and preparing teachers to use technology effectively. These regularly updated resources were posted on the Department's [website](#), [blog](#), and [YouTube channel](#) and shared via [Twitter](#) and [Facebook](#).

In October 2015, OET launched [#GoOpen](#), a national movement that supports states, school districts, and educators transitioning to openly licensed educational materials to transform teaching and learning. Openly licensed educational resources have enormous potential to increase access to high-quality educational opportunities in the United States when they are accessible via high-speed broadband.

#GoOpen was launched on October 29, 2015, at the Open Education Symposium, an event that brought together district leaders, state leaders, nonprofits, foundations, and private sector companies. As of September 30, 2016, 76 districts committed to transitioning to the use of openly licensed educational resources to replace traditional, static instructional materials, and 16 states committed to providing guidance and leadership for districts making this transition, as well as developing a statewide repository to search and discover resources.

### ***FY 2016 Barriers to Success***

Although much progress has been made in connecting schools to high speed broadband, future roadblocks to progress include access to needed fiber optic cable, especially in rural areas; affordability of broadband, especially in smaller and rural districts that are not eligible for bulk pricing discounts; and fully utilizing E-rate funds, since some districts still struggle to provide a percentage match to every E-rate dollar they receive. Several challenges remain in meeting the goals of this objective, including the need to educate the public about privacy and data security (leading to setbacks in the ability to use data to create personalized learning systems), difficulty measuring effectiveness without a robust evaluation program, and difficulty showing impact without data collection.

Limited resources may prevent OET from meeting its legislative mandate to provide technical assistance to states, districts, and programs across the Department and the federal government. This technical assistance has included research and evaluation, updating critical guidance documents, and providing ongoing partnership support to organizations to leverage technology to improve teaching and learning and in support of states and districts working to increase connectivity for students.

### ***Key Milestones and Future Actions***

Strategies for reaching this goal have included updating federal government policies and guidance, encouraging significant private sector commitments, and engaging in national outreach efforts to states, districts, technology providers, and nonprofit organizations. Collaboration within the Department, with other government agencies, and the education community as a whole is also key to success, as is developing sustainable, scalable solutions for using data and evidence in decision-making. Some strategies, especially around support for teachers adopting innovative approaches, evaluating effectiveness of technology-based approaches, and establishing best practices for maintaining student privacy, are dependent on

funding and staffing. The Department is working to identify ways to make its data more accessible and actionable for the public.

In the coming year, the Future Ready District Infrastructure Guide will be updated with an expanded connectivity section. OET will continue to collect examples of best practices for connecting schools, providing devices, and preparing teachers to use technology effectively and share them via its social media channels.

Work will continue on the Ed Tech RCE Coach tool during FY 2017. With the implementation of ESSA, the need for evidence-based decision-making has increased significantly. The goal is to fundamentally change the procurement and implementation process to include evidence-based decision-making throughout.

During FY 2017, OET will collect new examples from the field to add to the National Educational Technology Plan. This is based on the office's commitment to refresh the plan more frequently than the previous five-year cycle in order to better respond to the needs of the field.