

2016



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Based on Previous Analysis
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2016 SUMMARY OF PROFESSIONALS IN VISUAL IMPAIRMENT IN TEXAS

A review of education professionals who work with Texas students with visual impairments, including a description of selected characteristics, projections of attrition, and projected future needs.



2016 Executive Summary of Need for VI Professionals

Since 1996, the Texas School for the Blind and Visually Impaired has conducted an annual survey of the Visual Impairment (VI) consultants at the Education Service Centers, university VI programs, and TSBVI to assess the characteristics of and need for VI professionals in Texas. “VI professionals” includes certified teachers of students with visual impairments (TVIs) and certified orientation and mobility specialists (COMS). The most striking findings of the September 2016 survey include:

- In 2016, the **total number** of VI professionals, including leadership positions, decreased from 955 to 952 individuals. This continues a decline noted since 2014 in the total number of TVIs. The data include a drop in the number of COMS for the first time since 2013.
 - The number of full- and part-time TVIs providing direct service dropped by 5, from 692 to 687.
 - The number of COMS providing direct service dropped by 10 individuals to 270. This is the first decline in three years.
 - The loss of individuals is reflected in a drop in FTEs available for student instruction.
- Reports of **increased caseloads** continue.
 - For the seventh year in a row, the majority of the 20 regional VI consultants reported increasing caseloads for TVIs and COMS overall. Specifically,
 - Fourteen education service centers (ESCs) reported increased caseloads for TVIs
 - Seventeen ESCs saw an increase in caseloads for COMS.
- **Attrition in the previous year** decreased from 42 to 29 individuals. It remains to be seen whether attrition will level at this lower rate. Over the past six years, an average of 44 VI professionals leave the field each year.
- **Expanding cultural diversity of VI professionals remains a challenge.**
 - The number of Hispanic and African-American VI professionals decreased slightly in 2016.
 - Although the number of VI professionals who are Asian increased from 11 to 20, a large majority of VI professionals in Texas are Caucasian, while the student population grows more diverse.
- **Texas universities have increased student enrollment and the number of graduates completing training programs.**
 - There are a total of 183 future VI professionals in a program leading to certification as either a TVI or COMS, 29 more students than in 2015.
 - Eighty-three individuals received a TVI or O&M certification in 2016.
 - Eighty-three percent of students enrolled are receiving financial support through Texas

stipends for their training.

- Increases in the number of VI professionals appear to be directly affected by tuition.
 - Universities are training as many students as funds allow. Tuition and fees increased at an average of 112% (67% when adjusting for inflation) in Texas between 2003 and 2014 (Legislative Budget Board, 2016).
 - If tuition continues to rise, existing funding will provide less support to students than in previous years. This will create an even greater challenge in meeting the need for an adequate number of VI professionals.
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- **The number of students with visual impairments continues to grow.** In 2016, the number of students reported to the *Annual Registration of Students with Visual Impairments* increased by 2.5%, bringing the total number of students to 9900.

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Introduction

Since 1996, the Texas School for the Blind and Visually Impaired has conducted an annual survey to assess supply and demand for VI professionals in Texas. The term “VI professionals” includes certified teachers of students with visual impairments (TVIs) and certified orientation and mobility (O&M) specialists (or COMSs). This report provides information about the results of the survey conducted in September 2016.

Data were collected from the 20 regional education service centers (ESCs), the two Texas university personnel preparation programs that prepare VI professionals, and the Texas School for the Blind and Visually Impaired (TSBVI). TSBVI serves as a statewide resource, with a concentration of students and VI professionals. As a result, TSBVI data were collected separately from that of the ESCs. Unless otherwise noted, TSBVI data are included in the data presented in this report. Data from TSBVI include information about TSBVI professionals who provide direct services via the Comprehensive Program and who provide statewide training, short-term services, and leadership via the Short-Term Programs and Outreach Programs. (Note: More information about how data were collected is included in the Appendix.)

Characteristics of VI Professionals in Texas

The survey asked about the number of people *functioning* as VI professionals. Although many professionals may hold certification as a teacher of students with visual impairments (TVI) or as an orientation and mobility specialist (COMS or O&M specialist), this report summarizes data on those with *a current job assignment* as a TVI or COMS. Some VI professionals hold *both* TVI and O&M certifications. Those professionals whose current job assignment includes functioning in both roles are considered dually certified for this report.

It is important to note that most VI professionals are not classroom teachers; they are primarily itinerant specialists in visual impairment who work in a variety of schools, community settings, and homes. In addition to direct services, they also provide critical consultations to other team members on the functional impact of a specific visual impairment on a student in specific settings and ensure that appropriately modified materials are available. Additionally, they must travel to the student and provide instruction in the home, school, and community environments, not in a single classroom. Understanding the difference between classroom teachers and VI professionals is crucial when assessing the current and future need for specialists in visual impairment (Correa-Torres & Johnson Howell, 2004).

Number of VI professionals in Texas

This information has been gathered annually for 21 years. Over that time the number of VI professionals has risen with an occasional drop in numbers as reflected in data collected this year. The 2016 number of VI professionals in Texas is 952 individuals, or 869 full-time equivalents (FTEs). While the number of VI professionals decreased by 3 individuals in Fall

2016, the *Annual Registration of Students with Visual Impairments* from Spring 2016 identified 242 additional students, a 2.5% increase in the student population. (TSBVI, 2016).

Below is a graph that displays the changes in the number of VI professionals over a 10-year span, from 2006-2016.

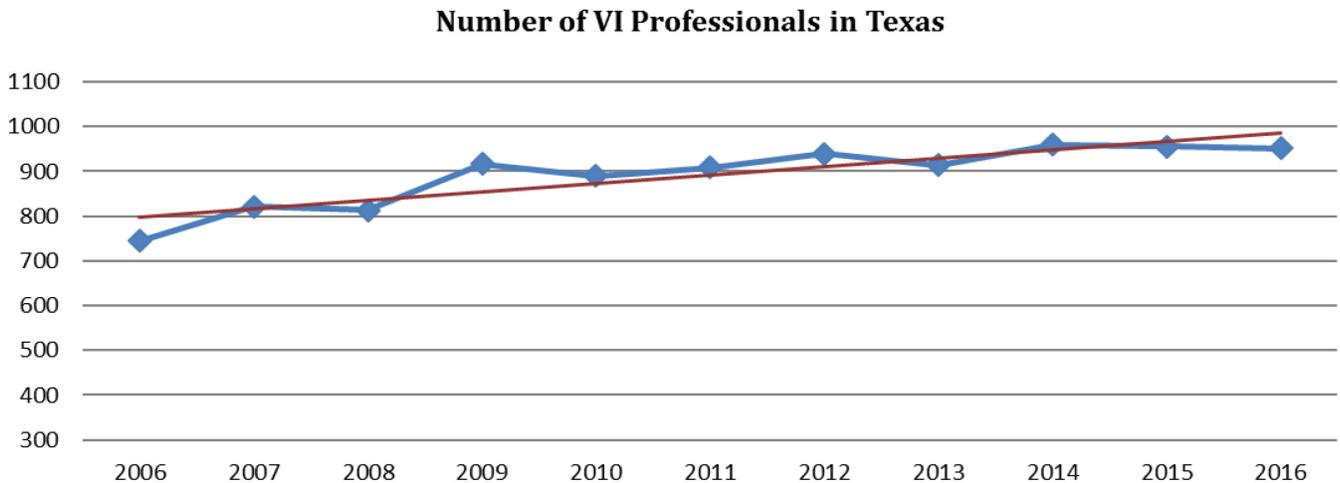


Table 1 that follows provides further details about VI professionals in Texas within the last 3 years. The term “individuals” includes both full- and part-time VI professionals. The full-time equivalent (FTE) data adjusts for the part-time VI professionals, including those who are dually certified.

Table 1: Total VI Professionals Statewide

	2014		2015		2016	
	Individuals	FTE ²	Individuals	FTE ²	Individuals	FTE ²
ESC leadership ¹	29	18.4	26	18.7	25	18.8
TSBVI statewide ¹	29	26.15	28	26.9	28	26.5
VI and O&M service providers (adjusted for dually certified professionals)	902	840	901	840	899	824
Total VI professionals	960	884.5	955	885.6	952	869.3

¹ TSBVI statewide consulting staff (Outreach and Short-Term Programs) and ESC consulting VI staff provide leadership/technical assistance statewide or within their organization. Educators at TSBVI or at ESCs who provide direct educational service to students with visual impairments are counted as "VI and O&M direct-service providers."

² FTE = (part time x .5) + full time for all charts

Direct-service providers

Below are data regarding full and part time direct-service providers. The term “direct-service providers” includes teachers of students with visual impairments (TVIs), certified orientation and mobility specialists (COMSs), and dually certified personnel who work with students on a regular basis, and/or are the teacher-of-record for issues related to visual impairments. This category does not include those who provide vision-related leadership, technical assistance, or statewide services at ESCs or TSBVI through the Short-Term Programs and Outreach Programs.

This survey captures information about the number of individuals working with students with visual impairments in the state of Texas in either a full- or part-time capacity. It does not gather information on the number of districts that employ full- and/or part-time VI professionals. Full- and part-time status is broadly defined. The reference to “full-time” and “part-time” refers to the total employment of the VI professional, not to how long a specific district employs a VI professional. Individuals who work part time but in multiple districts are considered “full-time VI professionals.” As a result, the number of “full-time” VI professionals described may vary from the number of districts or co-ops that employ TVIs on a full-time basis.

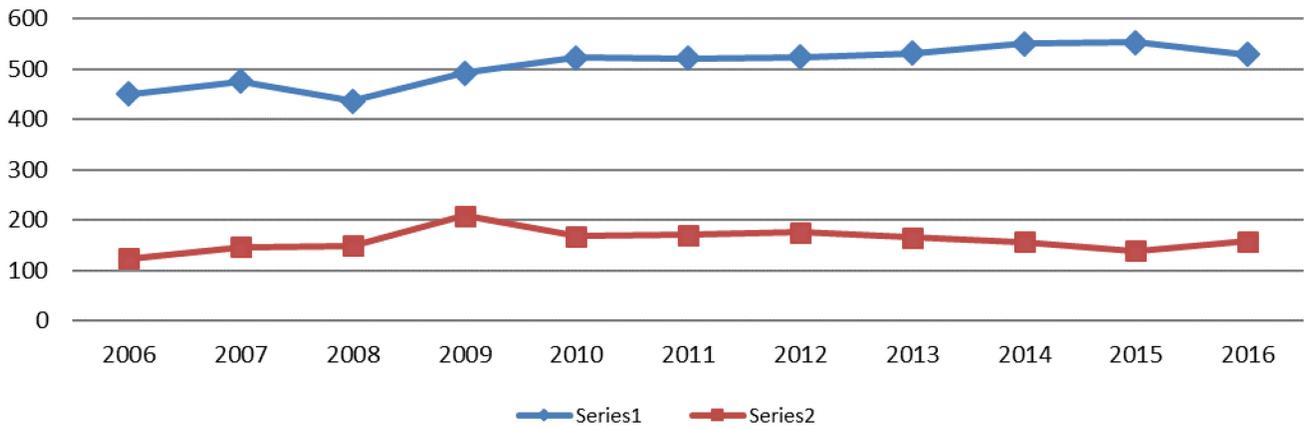
For the purposes of this survey, professionals who are certified *and* employed in both visual impairments and orientation and mobility (dually certified) are counted as a part-time TVI and a part-time COMS. These specialists are embedded in TVI data and the COMS data. Specific information on dually-certified VI professionals is listed in Table 4. Information about the number of combined direct-service providers has been adjusted for dually certified professionals.

Table 2: Direct-Service Providers: Teachers of Students with Visual Impairments (TVIs)

	2014		2015		2016	
	Individuals	FTE ¹	Individuals	FTE ¹	Individuals	FTE ¹
Full-time TVIs	551		553		529	
Part-time TVIs	157		139		158	
Total VI staff	708	629.5	692	622.5	687	608

1. FTE = part time x .5 + full time for all charts

Full- and Part-time TVIs



The total number of *individuals* (full and part time) who work as a TVI decreased in the year 2016 by 5 individuals, or by .3%. The decrease was seen in full-time individuals; the total number of part-time VI teachers grew by 19 this year.

The graph below shows the absence of significant change in the number of full - and part-time TVIs over the past five years. This lack of change along with the decrease in the availability of TVIs in 2016 is a concern given that 1,703 additional students have been added to the *Annual Registration of Students with Visual Impairments* since the number of TVIs peaked at 701 in 2009.

Full - and Part-time TVIs

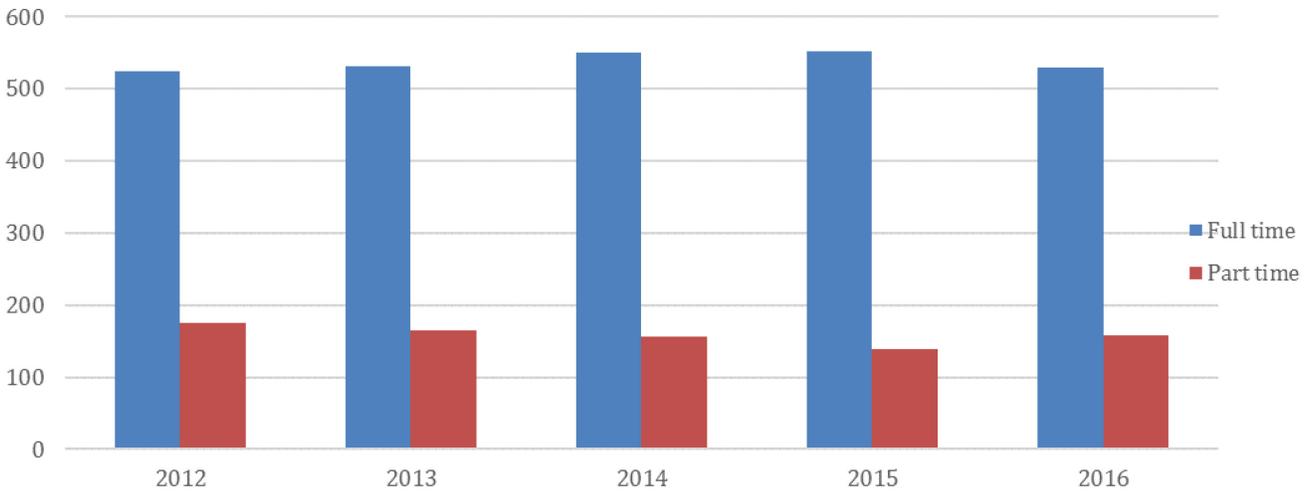


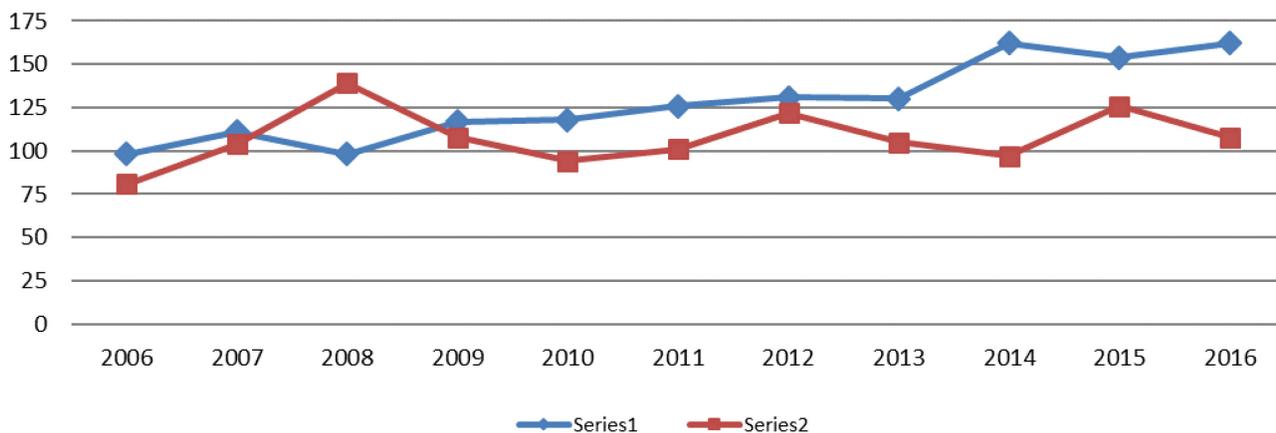
Table 3: Direct-Service Providers: Orientation and Mobility Specialists (COMSs)

	2014		2015		2016	
	Individuals	FTE ¹	Individuals	FTE ¹	Individuals	FTE ¹
Full-time COMSs	162		154		162	
Part-time COMSs	97		126		108	
Total O&M staff	259	210.5	280	217	270	216

1. FTE = part time x .5 + full time for all charts

As seen in Table 3 above and the graph below, the total number of O&M specialists decreased this year by 3.6 % or down by 10 individuals overall. This is the first decrease in the number of COMS reported since 2013. The decline is specifically seen in the part-time category, with a loss of 18 individuals. ESCs reported a gain of 8 COMS in full-time positions.

Full- and Part-time COMS



All initial evaluations of students with visual impairments must now include an O&M evaluation by a certified O&M specialist in the home, school and community setting per changes made to TEC 30.002. This emphasis may explain why 206 additional students were identified in 2016 as needing orientation and mobility services.

Statewide data on the number of students who receive O&M services have been collected since 2001. Since that time, this number of students has increased by 122% from 1,684 to 3,732. The rate of growth in O&M services over the past 16 years exceeds that of VI services overall (47%) during that same period. Although the number of students receiving O&M services is increasing, this year's drop in individual COMS must be considered as the total number of students with visual impairments continues to grow.

There are indications that access to evaluations is also affected by availability of adequate staff. It would appear that the passage of the new TEC language and an increase in staff since 2014 have helped increase the number of students who have been evaluated by an O&M specialist, and therefore the number of students who are receiving needed services.

Part-time service providers

As seen in Table 2 and Table 3 and the graphs above, the number of part-time TVIs increased while the number of part-time COMS decreased. Part-time VI professionals have advantages and disadvantages.

Advantages include supporting districts with a small number of students with visual impairments to meet their local needs. Part-time VI professionals can increase flexibility in districts that have just a bit more, or a bit less, than a full-time VI professional can reasonably

handle and still provide quality services. In addition, part-time VI professionals may either be employed by the district on a part-time, contractual basis for VI-only purposes, or may be hired full time with duties unrelated to visual impairments.

Disadvantages include logistical challenges in meeting the needs of the students. Due to other commitments and/or responsibilities, part-time staff members are at risk for not being able to provide the full caseload management or comprehensive array of services necessary for even small caseloads. Part-time contract employees are not part of the collaborative educational team if their service hours are limited to direct hours only by the hiring district or co-op. It may be hard to carry out collaborative consultation to the degree needed as a full-time employee would be able to do. Without time for collaboration, such VI professionals may not adequately meet the needs of their students since it is other team members who assist with generalization of skills learned when the specialist is not there.

Contract service providers

Many VI professionals work for school districts throughout the state as contract service providers on either a part-time or full-time basis. According to ESC consultants and TSBVI staff, 146 VI professionals serve in this manner. This number reflects 16% of the total number of individual VI professionals in Texas.

Dually certified VI professionals

Dually certified VI professionals are those who are certified and function both as a COMS and as a TVI. While many professionals may hold both certifications, not all dually certified professionals function in both capacities. This survey gathers data only about those who currently *function* both as a TVI and an O&M specialist. Since 2001, the number has fluctuated between 74 and 62, falling to 58 in 2016. With an average of 67 over the last 15 years, this year's total of 58 falls dramatically below that average. Given an *increase* of 19 part-time TVIs and a *decrease* of 18 part-time COMSs, it is possible that many who were functioning in a dual role in 2015 transitioned to a part-time TVI position in 2016 or a full-time TVI or COMS only position in 2016.

Table 4: Dually Certified Professionals

	2014	2015	2016
Dually certified	65	71	58

Dually certified professionals are unique and offer districts maximum flexibility. Administrators are able to modify work assignments according to the needs of the district and the needs of students for a particular year. While these VI professionals may be employed full time in a district, they must split their time and expertise between two different, although related,

professions. An administrator must understand the challenges faced by these professionals to ensure that neither area is slighted.

Direct services provided by ESCs

Statewide, districts are expanding their ability to serve students locally, while still relying on ESCs when that service delivery system works best for that district. The increase in full-time COMS may be a reason ESCs are serving fewer students. Therefore, it seems likely that there is a relationship between the number of COMS available at the local level and increases/decreases in services from the ESC.

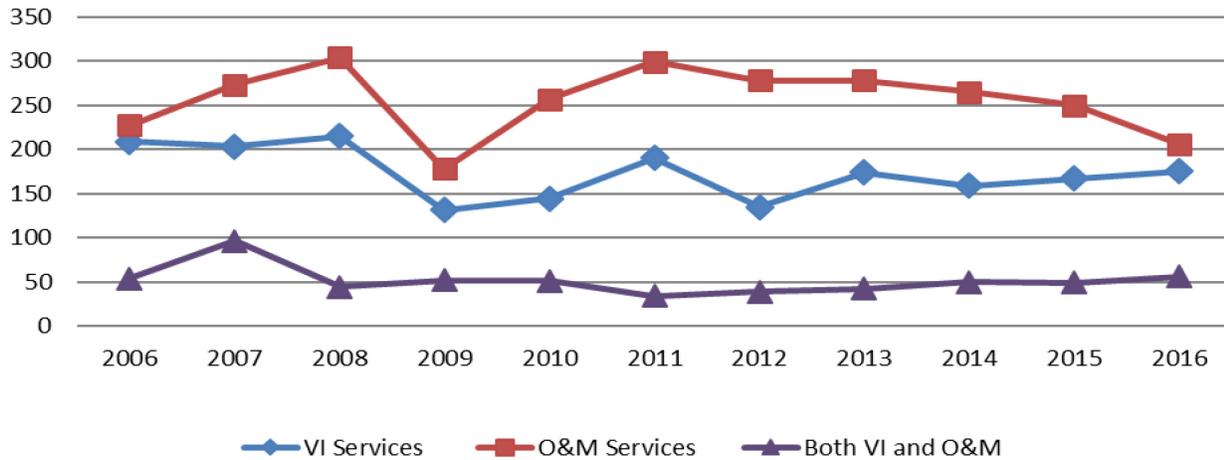
Each regional education service center (ESC) provides an array of services to districts. ESCs are a *major* part of the state’s infrastructure that ensures access to high quality VI services. Regional specialists in visual impairments are critical players in the provision of technical assistance, leadership, workshops, and materials for VI professionals, families, and students. They also assist TVIs and 106 braille transcribers within the state in braille production and act as a vital source of information on VI-related issues for special education administrators in the region. A significant portion of Texas’ reputation for leadership in visual impairments is due to the high level of skills and services provided by its VI specialists in regional education service centers.

Some ESC services include direct services to students with visual impairments. In these regions, the ESC staff members are listed on the student’s individualized education program (IEP). Eleven ESCs provide O&M services, 4 provide VI services, and 3 provide both. Table 5 reflects the number of students receiving direct services from the ESCs. This total decreased by 6% in 2016. The number of students receiving O&M services saw the most change, decreasing from 299 to 262 students.

Table 5: Students Receiving Services from ESCs

	2014	2015	2016
VI-only services (4 regions)	159	167	175
O&M-only services (11 regions)	265	250	206
Both VI and O&M services (3 regions)	50	49	56
Total	474	466	437

Students Receiving Services from ESCs



The provision of direct services from an ESC depends on many factors, including population size, region/district agreements, regional service delivery options, and fiscal constraints. While many factors can affect the number of students served by ESCs, the local districts’ capacity to meet the needs of their students is a primary one.

Overall perceptions of caseloads

Since 2010, this survey also asked about perceptions of overall changes in caseloads regionally. The survey did not ask about specific districts or how many districts in a region experienced a change. The VI consultants were asked to use their professional expertise in their estimates. Overall, the number of students

Table 6: VI ESC Consultants’ Perception of Regional Overall Changes in Caseloads

	TVIs	COMS
Increases	14	17
Decreases	0	0
No significant change	5	0
Unknown	1	3

For the seventh year in a row, the majority of regional VI consultants reported increasing caseloads for TVIs and COMS overall. Specifically, 14 of 20 education service centers (ESCs) reported increased caseloads for TVIs and 17 saw an increase in caseload size for COMS. Others noted caseloads remained the same. There were no reports of TVI or O&M caseloads decreasing across the state.

Cultural diversity

Texas is a diverse state and requires a diverse workforce to serve its citizens. This survey asks about African-American, Hispanic, and Asian VI professionals in relation to services provided. It also queries the number of VI professionals fluent in Spanish. The results from the survey follow.

Table 7: Culturally Diverse VI Professionals

Hispanic VI Professionals

	2014	2015	2016
TVIs	75	74	73
COMSs	13	15	18
Dually certified	10	8	4
Total	98	97	95

Spanish-Speaking VI Professionals

	2014	2015	2016
TVIs	73	68	67
COMSs	14	10	12
Dually certified	14	9	5
Total	101	87	84

African-American VI Professionals

	2014	2015	2016
TVIs	25	22	21
COMSs	15	15	15
Dually certified	0	0	0
Total	40	37	36

Asian VI Professionals

	2014	2015	2016
TVIs	10	7	11
COMSs	3	4	8
Dually certified	0	0	1
Total	13	11	20

This was a year with varied results in assessing diversity of VI professionals in Texas. Looking at specific categories, the number of VI professionals who are Asian increased by 81%.

African-American and Hispanic VI professionals in addition to those who are fluent in Spanish decreased slightly in 2016. This year ESC consultants and TSBVI staff were also asked to provide the number of Native-American and Caucasian VI professionals working in their region/school. Data provided showed that the majority of VI professionals in Texas are Caucasian, and there were no Native-American TVIs or COMSs identified. Recruiting and retaining ethnically and culturally diverse educators continues to be an important goal in Texas to reflect the student demographics.

VI professionals who have a visual impairment

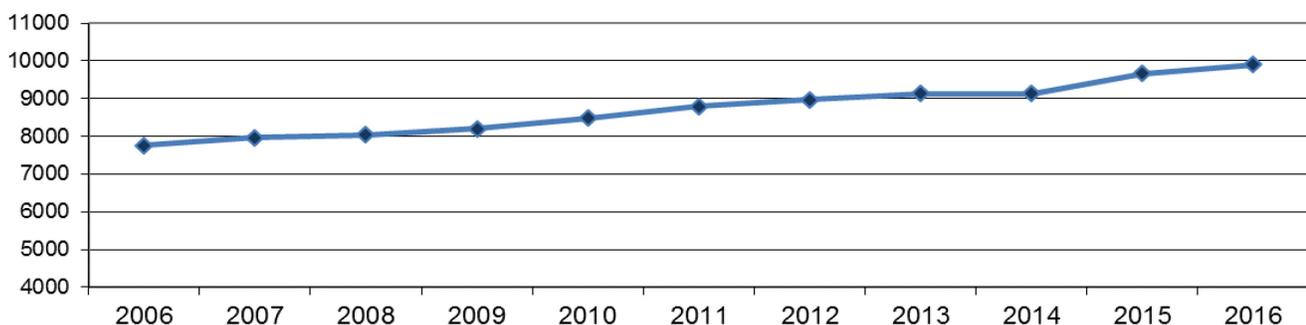
This year a question was added to the annual survey that asked how many VI professionals who are serving in districts within their regions are visually impaired. The ESCs reported that a total of 18 VI professionals in Texas who are blind or visually impaired. This includes direct service providers, ESC leadership, and TSBVI statewide consultants.

Growth in Population of Students with Visual Impairments and Impact on VI Professionals

In January, 2016 there were 9900 students with visual impairments in Texas. Data collected since 2000 project that the student population will increase by an average of 2.6% per year over the next 3 years (an additional 790 students) for a total of 10,690 students by 2019.

Below is a graph that displays the growth in the number of students with visual impairments over a 10-year span, from 2006-2016.

Students with Visual Impairments in Texas



Impact on teachers of students with visual impairments

Statewide, the student-to-teacher ratio increased in 2016 to 16 students per TVI full-time equivalent (FTE) position. Looking back over the past 10 years, caseloads have averaged 15 students per TVI FTE. If this ratio is applied to the number of expected new students, it is projected that Texas will need 52 additional FTEs by 2019 to accommodate student growth. However, given that only 77% of TVIs are full time, it will take more individuals to meet the

expected need of 52 FTEs. If the current ratio of full- to part-time teachers continues, the number of TVIs needed to total 52 FTEs will be closer to 65 individuals.

Impact on O&M specialists

Information about students with visual impairments is collected each January. The 2016 *Annual Registration of Students with Visual Impairments* indicated that the percentage of students who were receiving O&M services increased from 36.5% to almost 38%. Although the number of O&M service providers went down this year, an additional 833 students were evaluated for services and 206 students were added to caseloads. It is anticipated that by 2019, 4,295 students will be receiving O&M services, an additional 563 students.

Statewide, the average student-to-COMS caseload in 2016 is 17 students per FTE. Sixteen students per COMS is the average ratio seen over a 10-year-period. Using this data to predict need, by 2019 Texas will need an additional 35 full-time equivalent (FTE) orientation and mobility specialists to meet expected student growth.

In Texas, full-time equivalent positions can be quite different from the number of individuals needed to equal the FTEs, especially with O&M specialists. In 2016, 60% of COMSs were employed full time. These O&M specialists work full time in a single district or contract with several districts. If the current ratio of full- to part-time individuals is applied, the number of individual O&M specialists needed to result in 35 FTEs is likely to be closer to 49 individuals.

Texas Education Code (TEC) 30.002 requires that all *initial* evaluations of students with visual impairments include an O&M evaluation by a certified O&M specialist. This language was amended in 2013 and became effective immediately. The 39% increase in student orientation and mobility evaluations between 2013-2016 is likely due in part to the new language in TEC 30.002. In 2016 alone there were 833 additional students evaluated for O&M services.

Variance in growth of students with visual impairments and O&M services

An additional concern is the gap in the average growth rate of students (2.6% per yr.) and the increase in the percentage of students receiving O&M services (1% per yr.). It is unknown how many of the projected 10,690 students with visual impairments may need O&M services by 2019, since the level of evaluation in the past has not kept pace with the student population increase. As of January 2016, 31% of current students had not been evaluated by an O&M specialist.

Attrition

It should be noted that the attrition data collected in this survey specifically addresses those who have left the field. The data do not include those who move from school employment to private contractual work, change districts, or retire and re-hire in the same or a different district.

Attrition decreased for all VI professionals once again in 2016, by a total of 13 individuals. Specifically, attrition decreased by 1 for COMS and by 3 for those who are dually certified. TVIs had the biggest change, decreasing by 9. The VI profession has not seen an attrition total this low in six years.

Table 8: Actual Attrition within the Past Year (1-Year Attrition)

	2014	2015	2016
TVIs	36	35	26
COMSs	8	3	2
Dually certified	5	4	1
Total	49	42	29

Attrition factors

VI professionals are rare and difficult to find. Therefore, retention is of critical concern. Unlike other disciplines, even other high-need areas like math, when a VI professional is unavailable, typically there is no one else in the district with the specific expertise needed to assess and meet the unique educational needs of students with visual impairments.

As a result, students' functional and academic progress may suffer when they don't have access to critical services from a qualified professional. Several factors affect recruiting and attrition of VI professionals (U.S. Department of Education, 2010):

- Most educators and other likely candidates are unaware that the field exists. Students with visual impairments are a low-prevalence and extremely diverse population. Therefore, special recruitment challenges exist. People must be aware of the field and its possibilities before they can become a VI professional.
- Most VI professionals are mid-career professionals with an average of 7 years of professional experience in other careers and are likely to have shorter careers in this second field.
- Because VI professionals are so critical to student learning, a change of even one VI professional, in any single district, can have dramatic effects on the annual yearly progress of students.
- As a profession, education is an aging field. A study by Ingersoll and Merrill (2012) indicated that in the late 1980s, the age of teachers was in a typical distribution pattern with the peak at 41 years old. A review of that same data in 2008 showed that the peak had increased to 55 years old, and that the distribution is no longer in the typical bell pattern; it is flatter.

- In addition to age and economic factors, attrition is affected by factors commonly cited as important for retention. For VI professionals, among the most important retention factors are administrative support and caseload size. As reported previously, there has been a trend for the past 6 years indicating that caseloads are increasing.

Projected 3-year attrition

Projected attrition data is valuable for predicting and preparing for the VI professionals needed in the near future. Individuals who function as dually certified have both VI and O&M expertise. Projecting the attrition of dually certified personnel appears to be especially difficult with a reliable degree of accuracy. This is a fluid group. Based on district need, an individual may function as dually certified one year but not the next. The information below includes individuals who are dually certified in both categories (and cannot be added). The “Overall” data reflects all VI professionals and has been adjusted for dually certified VI professionals.

Gathering accurate data regarding retirement plans is challenging. In general, VI consultants at the ESCs must rely on others for the information. Some people may be reluctant to share their plans or their plans may change in the interim period. Others may retire from their job, but take another contractual job in another district. Historically, projections are below actual attrition by a noteworthy margin, particularly for TVIs. Nonetheless, VI consultants at the ESCs are the best and only source for information on future attrition for VI professionals.

It is important to mention again that the data addresses individuals who will leave the field. The data do not include those who move from school employment to private contractual work, change districts, or retire and re-hire in the same or a different district.

Table 9: Projected 3-Year Attrition

Projections made in:	2014	2015	2016
TVIs¹	98	95	92
COMSs¹	34	32	22
Overall¹	119	111	105

¹ Projections by ESC consultants reflect job expertise, not assignment. As a result, TVIs and COMSs include data for dually certified staff and cannot be totaled. “Overall” includes all VI professionals and is adjusted for dually certified VI professionals.

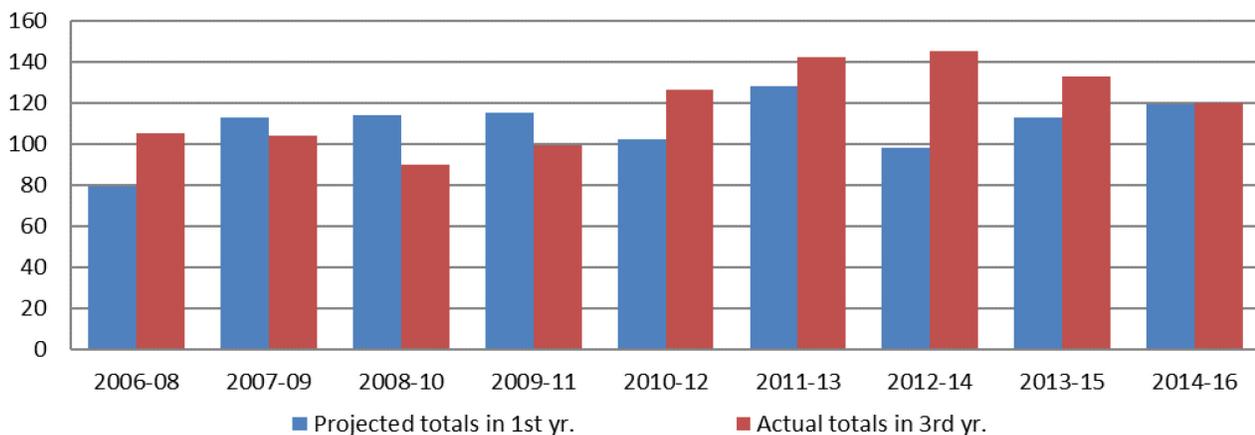
In 2016, the VI consultants at the ESCs projected that, overall, 105 VI professionals will leave the field within the next 3 years. This is a 5.4% decrease from 2015. Historically, the projections are more conservative, with more people leaving than projected. If this projection is accurate, at least 11% of *existing* VI professionals will retire or otherwise leave the field prior to 2018.

Projected vs. actual attrition

The most recent 3-year time frame is 2014 to 2016. In 2014, it was projected that 119 people would leave the field by 2016. For that same 2014–2016 time period, the field lost 120 VI professionals, a difference of one individual. ESC consultants appear to be closing the projected vs. actual attrition discrepancy over the last 2 years.

Bar chart compares projected totals (blue) and actual totals (red) for each of the 3 year periods. With the exception of the 3-year cycles that ended in 2010 and 2011, the actual attrition over the 3-year cycle is larger than the projected attrition. The gap in 2013 is one of the largest since the data has been collected. The gap of one individual is the smallest seen since data collected in 2002.

Projected versus Actual Attrition



* 2014–2016 is the last time frame for which a complete set of data is available.

In summary, VI professionals at the ESCs are the best and only source for statewide information on attrition over the past year and projected attrition. Projection remains a challenging task. During the economic downturn, the projections exceeded the actual attrition. This trend was reversed in 2012 when 25% more VI professionals left the field than projected in 2010. The most recent projection by the ESCs strongly indicates that the gap between projected vs. actual attrition is closing once again.

Anticipated Need

Interpreting and understanding the need for educational professionals traditionally relies on several factors, including the number of posted positions and recommendations from knowledgeable professionals. Below (Table 10 and the graph that follows) are data from each of these areas. The expected student growth of 790 students should be kept in mind when considering the anticipated need of the VI professionals who will serve them.

Posted positions

The respondents at each ESC and at TSBVI were asked how many part- or full-time positions were posted in their regions or at TSBVI in September 2016. These data were collected in September and reflect numbers after all regular hiring for the academic year had been completed. These positions remained unfilled and active because districts were unable to find a VI professional or the positions were opened after the start of the school year. The total number of posted positions aligns with this year's attrition total of 29.

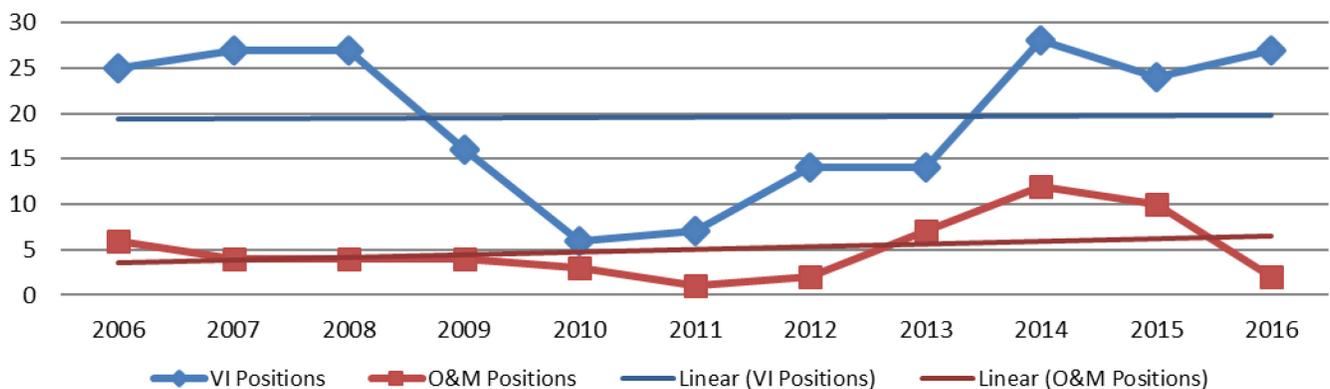
Table 10: Posted Positions

	2014	2015	2016
TVIs	28	24	27
COMSs	12	10	2
Dually certified	3	3	0
Total	43	37	29

The graph below shows the posted level of need between 1996 and 2016. This year the number of existing vacancies, after all typical hiring has been completed, decreased from 37 to 29. Statistically, the trend of having unfilled posted positions in September is decreasing over time, particularly with O&M specialists.

Previous formal and informal data indicates that vacancies are a poor indicator of actual need. The reasons vary. Many administrators will identify a need and encourage an existing educator to get VI certification rather than post a vacancy. Regardless of the reason, data collected since 1996 indicates a very poor correlation between vacancies in September and the need for VI professionals.

Posted Vacancies for VI Professionals



Recommendations by knowledgeable professionals

Regional VI consultants are the experts in visual impairments for their region. VI consultants and TSBVI staff were asked how many TVIs, O&M specialists, and dually certified personnel were needed in their area. The survey asked about projected need, not about positions available. However, historically, positions follow the availability of VI professionals. The results are indicated in the Tables 11 and 12 below.

When considering the needs, VI consultants are advised to reflect on real attrition over the past year and anticipated or projected growth and attrition (those who are expected to permanently leave the field).

In the past 5 years, the projected need for VI professionals has remained fairly stable, at an average of 206 VI professionals. After rising above 200 for 3 years in a row, the longer-term need fell below 200 in 2016.

There are two ways to assess the shorter- and longer-term projected needs: either by job assignment or by professional expertise. The terms “TVI” or “COMS” indicate a type of expertise as expressed through the certification in a professional discipline. Those in the “dually certified” category hold both certifications and function in both professional disciplines.

Functioning as a dually certified VI professional primarily reflects district need and therefore is a job assignment and not a unique discipline. Dually certified assignments are also very fluid and vary from year to year. Understanding need by expertise informs the future training and funding needs. For the purposes of this section of the report, the data reported will be by professional expertise, not by job assignment. Dually certified VI professionals function as part-time TVIs and part-time COMSs. As such they will be added to both areas as part-time TVIs and O&M specialists.

Table 11: Projected Short-Term Need: 12–24 Months

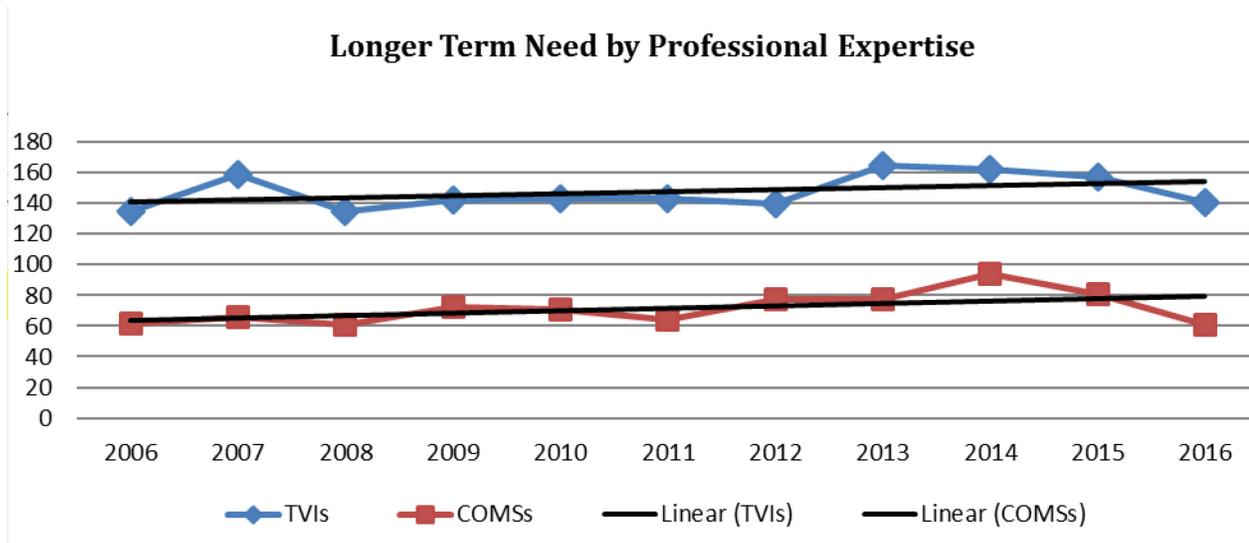
	2014	2015	2016
TVIs¹	95	92	79
COMSs¹	66	44	31
Overall¹	144	122	102

¹ Projections reflect job expertise, not assignment. As a result, “TVIs” and “COMSs” include data for dually certified staff in both categories and cannot be totaled. “Overall” includes all VI professionals and is adjusted for dually certified VI professionals.

Table 12: Projected Longer-Term Need: 24–36 Months

	2014	2015	2016
TVIs¹	162	157	141
COMS¹	94	81	61
Overall¹	228	212	184

¹ Projections reflect job expertise, not assignment. As a result, “TVIs” and “COMSs” include data for dually certified staff in both categories and cannot be totaled. “Overall” includes all VI professionals and is adjusted for dually certified VI professionals.



As seen in table 11 and 12 and in the graph above, the projected number of *additional* VI professionals needed within the next 3 years has dropped from previous totals. Given the anticipated student growth, it remains to be seen if this lowered projection by the ESCs continues and becomes a trend. The ESCs estimation of need peaked in 2013 for TVIs and hit a high of 94 COMS in 2014. Student growth, attrition, and the anticipation of updated orientation and mobility evaluation requirements in TEC 30.02 are all possible factors in the heightened 2013-14 totals.

Discussion of projected need and teachers of students with visual impairments (TVIs)

The projected need for certified teachers of students with visual impairments (TVIs) decreased in both the shorter- and longer-term categories. As discussed in the Growth of Students with Visual Impairments and Impact on VI Professionals (page 9), Texas will need between 52 and 65 TVIs to meet the anticipated growth in the number of students with visual impairments.

In addition to meeting the needs related to expected demographic increases, Texas will need to replace TVIs who leave the field. It is projected that 92 individuals with VI expertise (TVIs and dually certified professionals) will leave the field prior to 2019. Historically, the 3-year attrition ratios for those with VI expertise exceed projections by 15%. The attrition could be

closer to 106 full- and part-time individuals certified as teachers of students with visual impairments.

Combining projected growth and attrition, Texas will need between 144 and 176 teachers of students with visual impairments in the next 3 years to replace those who are likely to leave and respond to anticipated growth. The ESCs’ projection of 141 TVIs falls just below that range.

Table 12: Projected Need and TVIs

Number of TVIs needed to meet student growth	52 - 65
Number of TVIs needed due to attrition	92-106
Total FTE needed by 2019	144 - 171

Universities are maximizing their existing resources to produce TVIs. In the Fall of 2016, 116 people were seeking VI certification. Fifty-one are working under an emergency permit. These TVIs are already working with students and included in this count as TVIs. Provided that university enrollment and completion rates continue to reflect the totals seen in 2016, the number of newly certified TVIs (159) anticipated in 2019 will fall within the range of anticipated need. However, given that university enrollment closely reflects the amount of stipends available and assuming tuition costs continue to increase at a steady rate, funding will remain an essential factor in the training of new TVIs.

Discussion of projected need and O&M specialists

The projected need for orientation and mobility specialists (COMSs) also decreased in both the shorter- and longer-term categories. Projecting need for O&M specialists included consideration of the following additional factors:

- * At this point, there are no reliable statistical projections on the percentage of students with visual impairments who will need O&M services *at any given time*.
- * Further, 31% of current students with visual impairments have not had an O&M evaluation to determine whether they need O&M services.
- * As of 2014-2015, TEC 30.002 requires that *initial* evaluations of students with visual impairments include an O&M evaluation.

As discussed in the Growth of Students with Visual Impairments and Impact on VI Professionals (page 10), Texas will need between 35 and 49 O&M specialists to meet the anticipated growth in the number of students with visual impairments.

Regional VI consultants project that 22 people with O&M expertise (O&M specialists and dually certified professionals) will be leaving the field by 2019. If the expected student growth is combined with the 3-year projected attrition and based on statewide average student-to-teacher ratios, it is likely that Texas will need approximately 57 additional full- and part-time O&M specialists over the next 3 years. The projection of 61 made by the ESC consultants, who know their regions best, is slightly above this figure. The variance is likely due to the increases in services anticipated with additional evaluations. The next step is for districts to ensure that all students with visual impairments receive consideration by an O&M specialist of their need for an orientation and mobility evaluation. Only then can the educational team members be assured that those who need O&M instruction are receiving it.

Universities are maximizing their existing resources to produce COMS. An average of 29 individuals complete the orientation and mobility certification process each year. Presuming that the number of completers continues at the same rate, and that districts will hire the O&M specialists, the need for 57-61 new COMS by 2019 will not only be met but exceeded. This is encouraging! However, future attrition should also be taken into consideration. This year the O&M field saw a drop of 10 individuals, the first decrease since 2013. This loss is reflected in the drop of FTEs available for student instruction.

Enrollment to Prepare VI Professionals

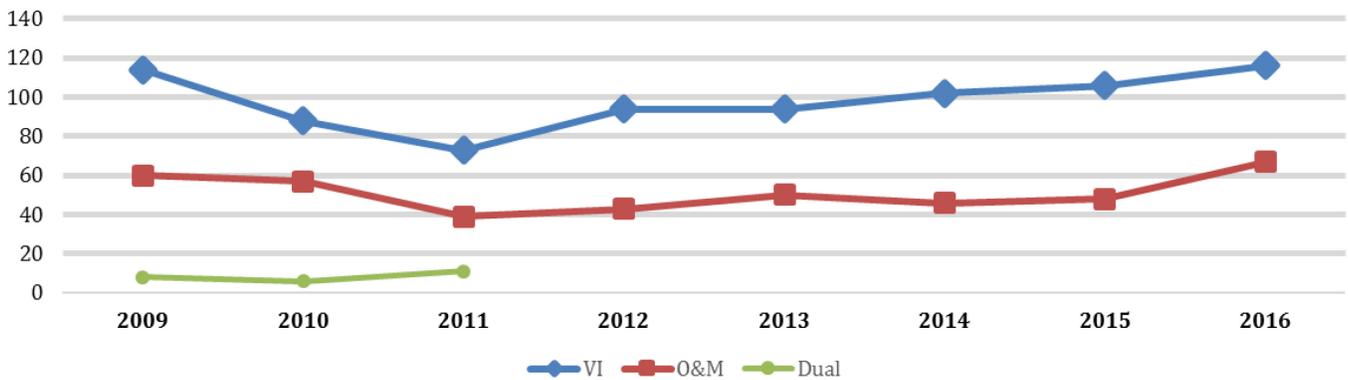
Texas is fortunate to have two collaborative partners who train VI professionals: Texas Tech University (TTU) and Stephen F. Austin State University (SFASU). Both schools have graduate programs for TVIs and O&M specialists. SFASU also has an undergraduate program for orientation and mobility specialists (COMSs) funded by the Rehabilitation Services Administration. Both schools serve students throughout the state with a combination of face-to-face, voice-over-the-internet, and Internet courses.

The combination of distance-learning options and supportive funding has had a major impact on the number of VI professionals in Texas. Enrollments increased substantially with the development of distance-learning options in 1998. Since then, the biggest factor affecting enrollment seems to be the availability of tuition support. Increases in the number of VI professionals appear to be directly affected by tuition support.

Table 13: Number of Students in Training Programs

	2014	2015	2016
Visual impairments	102	106	116
Orientation and mobility (incl. undergraduates)	46	48	67
Total	148	154	183

Number of Individuals Registered for Courses in Fall of Each Year



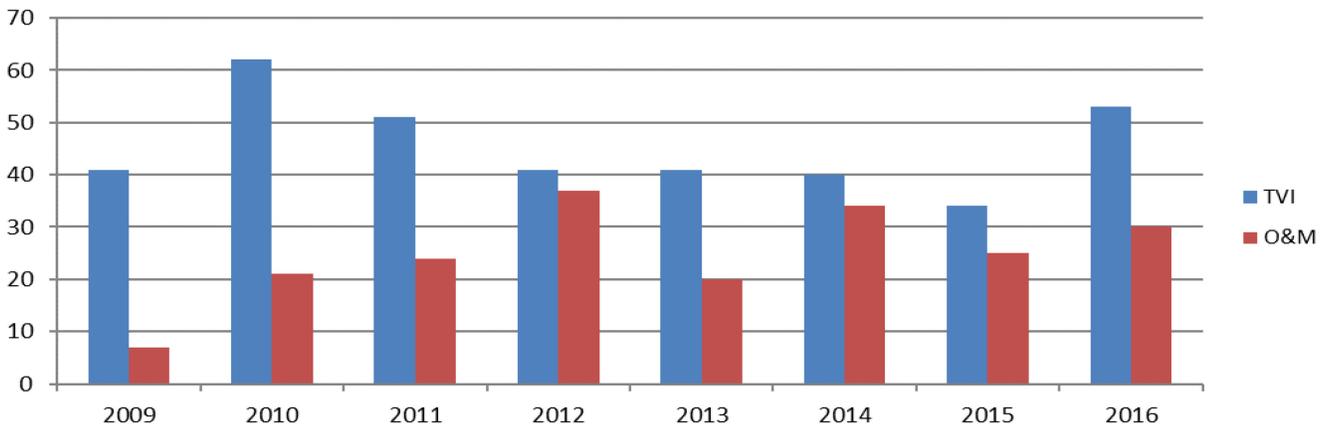
* The data collection definitions changed in 2012. Since students must complete one certification before the other, they are now counted in either the VI or O&M category.

In the Fall of 2016, a total of 183 students were registered for courses leading to certification either as a teacher of students with visual impairments (TVI) or an orientation and mobility specialist (COMS). Eighteen of the pre-service O&M specialists are undergraduates. One-hundred-sixteen individuals are seeking VI certification and 67 are en route to O&M certification. This is a 19.5% improvement over the 2015 totals. In 2016, the 5-year average for program completion increased by 8.5%.

Candidates must complete their entire program before they can start working as an O&M specialist. O&M certification is a national certification and valid in any state. It is also applicable for all age groups, not just for school-age students. Unless school districts hire graduating O&M specialists, many new O&M specialists may take positions elsewhere. It is hoped that most new O&M specialists will find jobs in Texas in education.

In the past year, a total of 83 people completed their certification programs. Fifty-three individuals completed VI training and 30 completed O&M training. This is 26% above the 5-year average of 42 for TVIs and 3% above the average 29 for COMSs and an encouraging trend toward meeting student growth.

Number of Individuals Completing Certification Programs



In 2016, the percentage of students in personnel preparation programs (VI Certification and O&M) receiving financial assistance, a strong incentive for enrollment, increased from 74% to 83%. Eighty-four percent of those in the TVI certification programs and 82% in the O&M programs received assistance.

Table 14: Percentage of Students Receiving Support through Texas Grants

	2014	2015	2016
TVIs	80%	78%	84%
COMSs	57%	65%	82%

Tuition continues to increase at a steady rate. Tuition and fees have risen an average of 112% in Texas since 2003 or 67% when adjusting for inflation (Legislative Budget Board, 2016). Increases in the number of VI professionals appear to be directly affected by tuition. Therefore, with the expectation that tuition will continue to rise, existing funding will provide less support to students than in previous years, consequently creating a greater challenge of meeting the need of an adequate number of VI professionals. In addition to the need for more funding for student tuition going forward, as the university programs continue to grow to meet statewide shortages, there is also a need for increased program operation funding, particularly funds to hire additional full-time faculty to improve program quality and meet teacher candidate needs.

Summary

This report reviewed characteristics of and indicators of need for VI professionals. In September 2016, Texas had 952 individuals (869.3 FTEs) providing vision-related services, either directly to students or in a leadership and/or technical-assistance capacity. After adjusting for dually certified professionals (58), there are 899 individuals providing direct service either on a full- or part-time basis. The total includes the following full- or part-time individuals:

- 687 teachers certified in visual impairments (TVIs) or 608 FTEs; a reduction of 5 individuals and 14.5 FTEs since 2015.
- 270 orientation and mobility specialists (COMSs) or 216 FTEs; a reduction of 10 individuals and 1 FTE since 2015.
- 58 dually certified professionals; down by 13 from 2015.

In addition, there are:

- 53 regional or statewide leadership or technical-assistance specialists (45.3 FTEs)
 - 25 individuals or 18.8 FTEs are at the regional education service centers (ESC)
 - 28 individuals or 26.5 FTEs are at the Texas School for the Blind and Visually Impaired either in Outreach or Short-Term Programs

With a current total of 25, the number of individuals providing leadership and technical assistance at the ESCs showed a decrease of one individual in 2016 and four individuals since 2014. However, the actual amount of time available to assist districts and families remained about the same. ESCs reported 18.8 FTEs this year and 18.7 in 2015.

The total number of VI professionals (both TVIs and COMS) decreased by 3 individuals in 2016. The TVI category showed a decrease of 5. The 2016 total number of TVIs (687) reflects a decrease of less than 1% from 2015, yet the number of students continually increases.

The COMSs decreased from 280 to 270 individuals, or by 3.6%. This is the first decrease seen in the number of COMSs since 2013. This could be the result of various factors including a transition from functioning in a dually certified role to a full-time TVI or COMS position.

In September 2016, there were 21 TVIs and 15 O&M specialists who are African-American. The Hispanic VI professionals included 73 TVIs, 18 COMSs, and 4 dually certified professionals. Sixty-seven TVIs, 12 COMSs, and 5 dually certified professionals are fluent in Spanish. There are 11 TVIs and 8 COMSs who are Asian. Overall, this reflects a decrease in the African-American and Hispanic VI professionals and an 82% increase in those who are Asian. More efforts to expand diversity to reflect the student demographic are clearly indicated.

An examination of attrition within the past year yielded positive results. The attrition rate in 2016 fell below the 10-year average across all VI professionals. This year 29 VI professionals left the field, 13 fewer than last year. Twenty-six TVIs, 2 COMS, and 1 dually certified VI professional, respectively, left the field.

The projected 3-year attrition rate was estimated at 105, or 12% of all VI professionals. Further analysis of the data over the past decade indicates that although the regional VI consultants are the best predictors for attrition and the projected vs. actual attrition gap continues to lessen substantially, even they have underestimated attrition for TVIs and COMS. Therefore, it is likely that as retirements are realized, attrition over the next 3 years will continue to be a pertinent factor in planning for an adequate number of VI professionals

A long-term examination of growth patterns predicts that the number of students with visual impairments needing services will increase by 2.6% each year, or by 790 additional students from 2016 to 2019. It is expected that Texas will have at least 10,690 students with visual impairments by 2019.

This report assessed need based on two methods:

- (a) counting the number of posted available positions in September, and
- (b) taking recommendations from VI consultants at the ESCs.

Job-vacancy-posting data gathered since 1996 have proven to be a poor predictor of need. Even so, the number of vacancies in September 2016 was down. The total numbers of vacancies decreased from 37 in 2015 to 29 in 2016 after more than doubling from 2013-2014.

This report uses a knowledgeable informant model to project need. It considers the recommendations of the VI specialists at the regional education service centers to be the best indicators of real need in Texas. These professionals have extensive knowledge of their districts and region. Their estimates indicate a steady but attainable need for VI professionals. With enrollment in university programs on the rise, the VI profession conceivably will not have the same level of difficulty in meeting the needs of students with visual impairments as in the past.

Table 15: Summary of Need by Expertise

	TVIs	O&M specialists	Overall
12–24-month-need projections	79	31	102
24–36-month-need projections	141	61	184

Both types of indicators of need were reviewed in this document: posted vacancies and recommendations by regional consultants. While each source revealed a different set of

numbers, what is clear is that regardless of the method used, Texas has an ongoing need for VI professionals. Although the increase in university enrollment and completers seen in 2016 is encouraging, tuition support is imperative in sustaining this number of newly certified TVIs and O&M specialists needed to serve the growing number of children with visual impairments across the state.

Appendix

Methodology

The ESC consultant and TSBVI survey asked about the number of people *functioning* as VI professionals. These individuals may be TVIs, O&M specialists, or both. Those *functioning* in both roles are referred to as being dually certified. The VI professionals provide instruction to students in a direct or consultative capacity and/or provide leadership or technical assistance from regional education service centers (ESCs) or Texas School for the Blind and Visually Impaired (TSBVI). Those who provide leadership or technical assistance may have full- or part-time positions.

Texas employs both full- and part-time VI professionals. Full-time professionals are those who work at least .6 FTE or more. Part-time professionals are those who work .5 FTE or less. This method has been used by TEA and is considered to be an adequate estimate of the number of full-time equivalent VI professionals. Part-time VI professionals are a significant proportion of the Texas VI workforce (23% of the TVIs and 40% of the O&M specialists).

When relevant, information about full-time equivalent (FTE) positions is also presented. The number of FTE staff was determined by multiplying the number of people employed in part-time positions by .5 and adding the result to the number of people employed as full-time VI professionals (part time X .5 + full time = FTE).

The descriptive and need data reflect statewide totals of a combination of TVIs and O&M professionals. Data on each profession are also included separately. When appropriate, data on dually certified VI professionals are also presented.

People who provide both O&M and VI services (dually certified) are counted as part-time TVI and part-time O&M. Although they may be full-time employees of a district or cooperative, dually certified professionals are considered part-time TVIs and part-time O&M specialists. As a result, dually certified individuals appear on both the TVI and O&M tables as part-time professionals. This results in a variance between the data listed in the Statewide Totals table (Table 1) and the combined totals of the Direct-Service Provider tables (Tables 2 and 3). Simply adding together the discipline-specific totals would result in double-counting some individuals. Statewide totals are adjusted for dually certified professionals.

This survey captures information about the number of individuals working with students with visual impairments in the state of Texas in either a full- or part-time capacity. It does not gather information on the number of districts that employ full- and/or part-time VI professionals. Full- and part-time status is broadly defined. Individuals who work part time but in multiple districts are considered “full-time VI professionals.” The reference to “full time” or “part time” refers to

the total employment of the VI professional, not to how long a specific district employs a VI professional.

For the purposes of this survey, professionals who are certified *and* employed in both visual impairments and orientation and mobility (dually certified) are counted as a part-time teacher of students with visual impairments (TVI) and a part-time orientation and mobility specialist (COMS). These specialists are embedded in the TVI data and the COMS data. Specific information on dually certified VI professionals is listed in Table 4. Information about the number of combined direct-service providers has been adjusted for dually certified professionals.

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