



T S B V I

2007 Summary of Need for VI Professionals in Texas

Compiled by KC Dignan, PhD

Introduction

Since 1996 the Texas School for the Blind and Visually Impaired has conducted an annual survey to assess the need for VI professionals in Texas. “VI professionals” includes teachers certified in visual impairments (VI teachers) and certified orientation and mobility specialists (O&Ms). Individuals with both certifications are referred to as “dually certified.” This report will provide information about the results of the survey conducted in September 2007.

The most striking findings include:

- After declining for 2 years in 2007 the number of all VI professionals in Texas increased to 857, an increase of 4.8%. The number of O&M specialists increased by 20%.
- 13% of the VI professionals in Texas (113 individuals) are projected to leave the field within the next 3 years.
- Long-term planning for personnel needs are hampered by under-projecting actual attrition levels. On average, the margin-of-error for projected 3-year attrition is 21%. Applying this margin of error brings the likely 3-year attrition to 135 individuals or 16% of the current workforce.
- The number of new positions created is not keeping pace with growth. With an average VI student increase of 3%, we need to plan not only for attrition, but growth, just to keep pace with current levels of services.
- The cultural diversity of VI professionals is changing, yet still not keeping pace with the student population in Texas. The level of cultural diversity among professionals is not representative of the student population.
- Universities are training as many VI professionals as funds allow. 99 VI professionals, many of whom are already working under a probationary certificate, are currently in training programs.

Data was collected from the 20 regional education service centers and the Texas School for the Blind and Visually Impaired (TSBVI). Because TSBVI serves all of Texas, the concentration of

students and VI professionals is such that TSBVI data are collected separately from that of regional education service centers (ESCs). Unless otherwise noted TSBVI data is included in the data presented in this report.

Characteristics of VI professionals in Texas

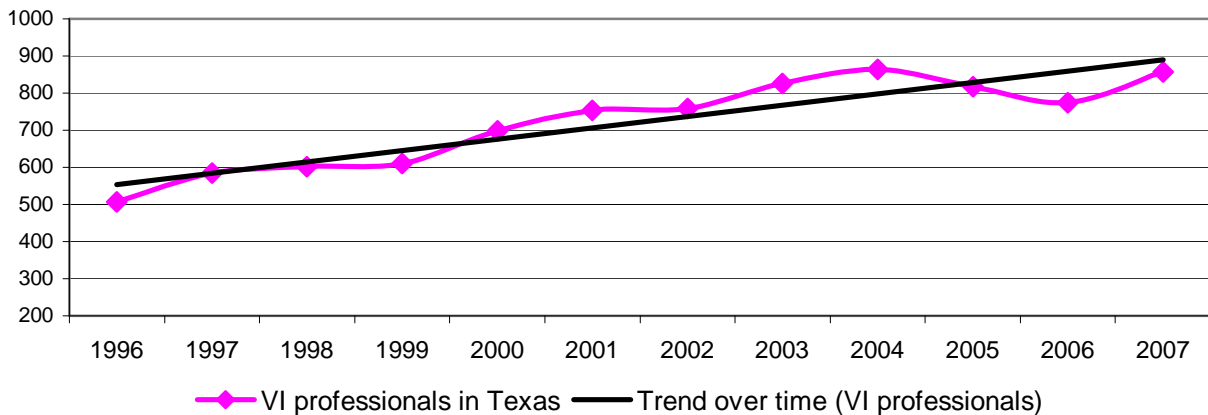
The survey asked about the number of people *functioning* as VI professionals.

Number of VI professionals in Texas

This data has been gathered annually since 1996. Overall there has been growth in the number of individuals certified to serve students with visual impairments. For two consecutive years (2005 – 2006) the reported number of VI teachers declined. However, this year the number has once again increased. Over a 12 year-span the number has increased. A chart showing the changes is below.

Information about how this data was collected is included in the Appendix.

Growth Trends for VI Professionals Statewide



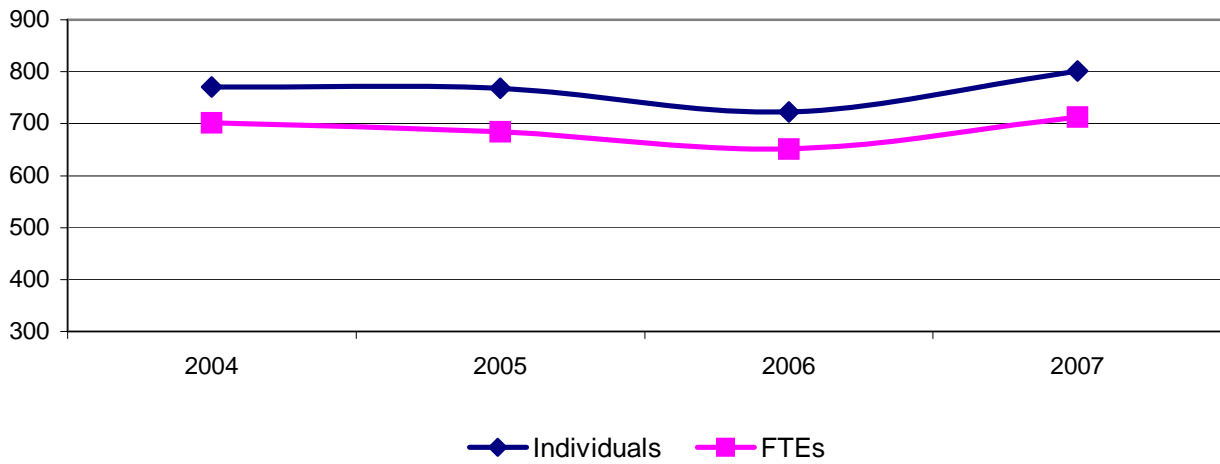
Total VI Professionals Statewide

	2005		2006		2007	
	Individuals	FTE ²	Individuals	FTE ²	Individuals	FTE ²
TSBVI Outreach ¹	21	19	21	19.5	23	21.5
ESC Leadership ¹	29	21.2	32	22	32	20.4
VI and O&M service providers (adjusted for dually certified professionals)	768	684	722	651	802	712.5
Total VI Staff	818	713.2	775	692.5	857	754.4

¹ TSBVI outreach and ESC consulting VI staff provide leadership/technical assistance statewide or within their region. Educators at TSBVI or 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

Combined Direct Service Providers

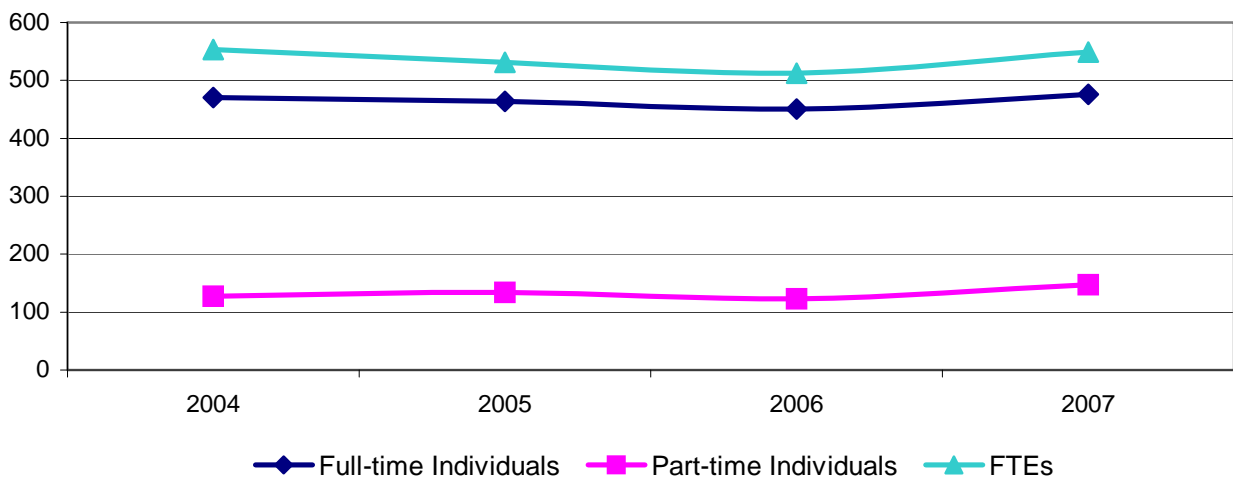


Direct Service Providers: VI teachers (includes 72 dually certified VI professionals)

	2005		2006		2007	
	Individuals	FTE ¹	Individuals	FTE ¹	Individuals	FTE ¹
Full-time VI teachers	464		451		476	
Part-time VI teachers	134		123		147	
Total VI Staff	598	531	574	512.5	623	549.5

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

VI Teachers in Texas

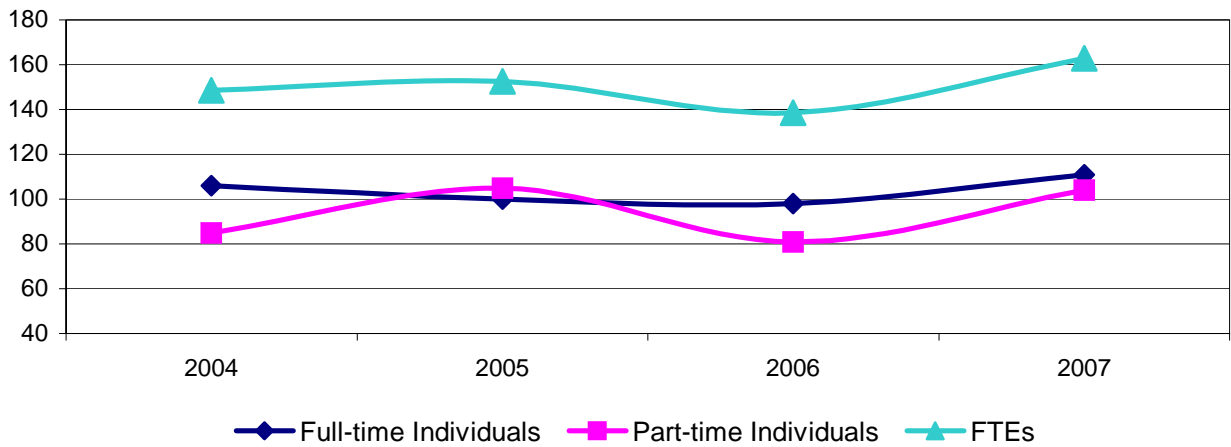


Direct Service Providers: O&M specialists (includes 72 dually certified VI professionals)

	2005		2006		2007	
	Individuals	FTE ¹	Individuals	FTE ¹	Individuals	FTE ¹
Full-time O&M specialists	100		98		111	
Part-time O&M specialists	105		81		104	
Total O&M Staff	205	152.5	179	138.5	215	163

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

O&M Specialists in Texas



Dually certified VI professionals

Dually certified VI professionals are those who are certified both as an O&M specialist and as a VI teacher. While many professionals may hold both certifications, not all dually certified professionals serve in both capacities. This survey gathers data only about those who *function* both as a VI teacher and an O&M specialist. This year’s data is an increase since last year. However, prior to 2006, the number of dually certified professionals remained in the mid-70s. In 2006 the number dipped by 10 individuals. This year it was back to a more typical number: 72. Dually certified professionals are unique and offer districts maximum flexibility. They also present challenges to administration and service provision. The change between 2006 and 2007 likely represents changes in staffing needs statewide.

Dually Certified Professionals

	2005	2006	2007
Dually certified	72	62	72

New Positions and Attrition

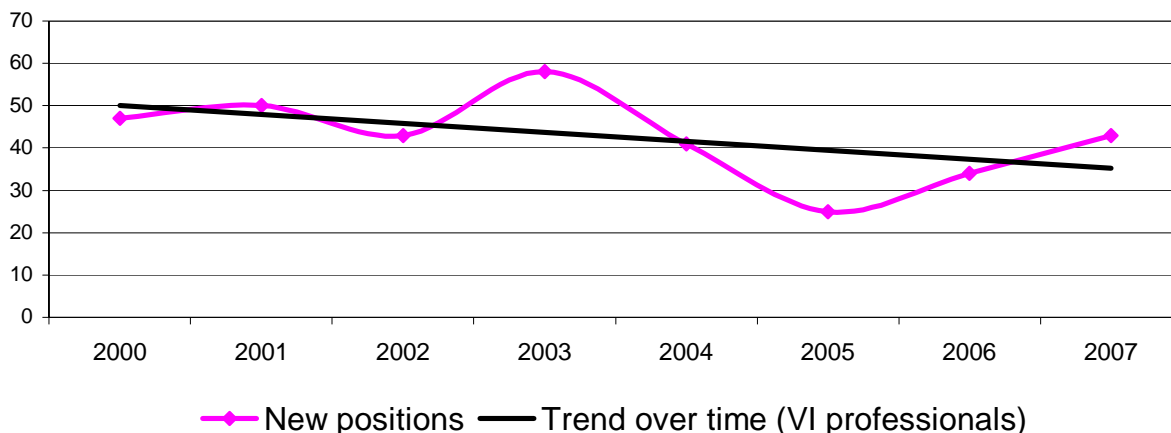
New Positions

On average, the number of students has increased by 3% a year, according to the *Annual Registration of Students with Visual Impairments*. Data about new positions to meet the increasing need has been collected since 2000. Texas reached its peak in developing new positions for VI teachers and dually certified professionals in 2003. The peak for O&M specialists was in 2004. The lowest number of new positions occurred in 2005. Overall, in 2007 Texas experienced a significant growth in the number of new VI teacher positions, nearly recovering from the 2005 decline. The number of new positions for O&M specialists and dually certified professionals remains either unchanged, or reduced from the past two years.

New Positions	2003	2004	2005	2006	2007
VI Teacher	48	28	17	26	37
O&M Specialist	4	12	5	5	5
Dual Certified	6	1	3	3	1
Total	58	41	25	34	43

The recent hopeful changes do not seem to indicate a commitment towards growing and hiring more VI professionals to meet the needs of an ever-increasing population of students with visual impairments. Or the lack of sufficient growth may reflect the capacity to train interested candidates. As the chart below indicates, the number of new positions varies year to year, sometimes significantly. However, adding a trend line indicates that, statistically, there is no evidence of overall growth. In fact, there were 205 new students statewide. Applying the national recommendations of 12 students per caseload indicates that in 2007 Texas needed a minimum of 17 new VI teachers and O&M specialists (some of whom would serve the same students), not nine.

New Positions for VI Professionals



Attrition Factors

Much has been written about the retiring and retention of educators. VI professionals are rare and difficult to find. Therefore retention is a critical concern. Unlike many disciplines, even other high-need areas like math, when a VI professional is unavailable there is no one who can help meet the student's needs. As a result, students' progress and independence may suffer when a student has sub-standard access to critical services from a highly qualified professional.

Several factors affect recruiting and attrition in the VI fields:

- Most VI professionals are mid-career professionals with an average of seven years professional experience in other careers and are likely to have shorter careers in this second field.
- Blindness is a low incidence field with a very small population. Most educators and other likely candidates are unaware that the field exists. Therefore special recruitment challenges remain. People must be aware of the field and its possibilities before they can become a VI professional.
- It is not uncommon for mid-career professionals to need two or three years before they decide to initiate VI training, and then another one or two years to be trained.
- There are limited professional preparation options for those who do decide to become a VI professional. In Texas there are only two programs. However, most states don't even have a single program. Distance education options are making it easier to access training for mid-career professionals who may not be able to leave their home and jobs for training.
- Because VI professionals are so rare in any single district a change of even one person can have dramatic effects on the annual yearly progress of students.
- Changes in the number of those who *function* as dually certified might reflect changes in function, and not individuals leaving the field.

Under-projecting 3-year attrition can affect longer-term planning for VI professionals and discounts the time needed for recruitment and training.

As a result, it is important to consider and analyze the existing and projected attrition rates when considering personnel needs for the future. Under-projecting 3-year attrition can affect longer-term planning for VI professionals and discounts the time needed for recruitment and training.

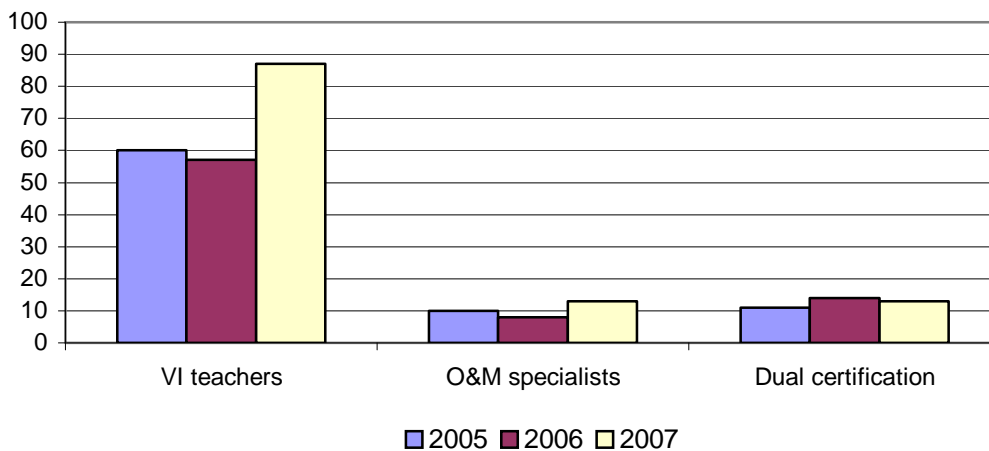
Actual 1-Year Attrition (from 2007 data)

	2005	2006	2007
VI Teacher	23	23	33
O&M Specialist	4	5	6
Dual Certified	2	0	1
Total	29	28	40

Projected 3-Year Attrition

Projections from:	2005	2006	2007
VI Teacher	59	57	87
O&M Specialist	9	8	13
Dual Certified	11	14	13
Total	79	79	113

Projected 3-Year Attrition



The 1-year attrition and projected 3-year attrition numbers have jumped substantially this year. Complete (3-year) data comparisons are available for the years 2005 – 2007. The data generates two concerns:

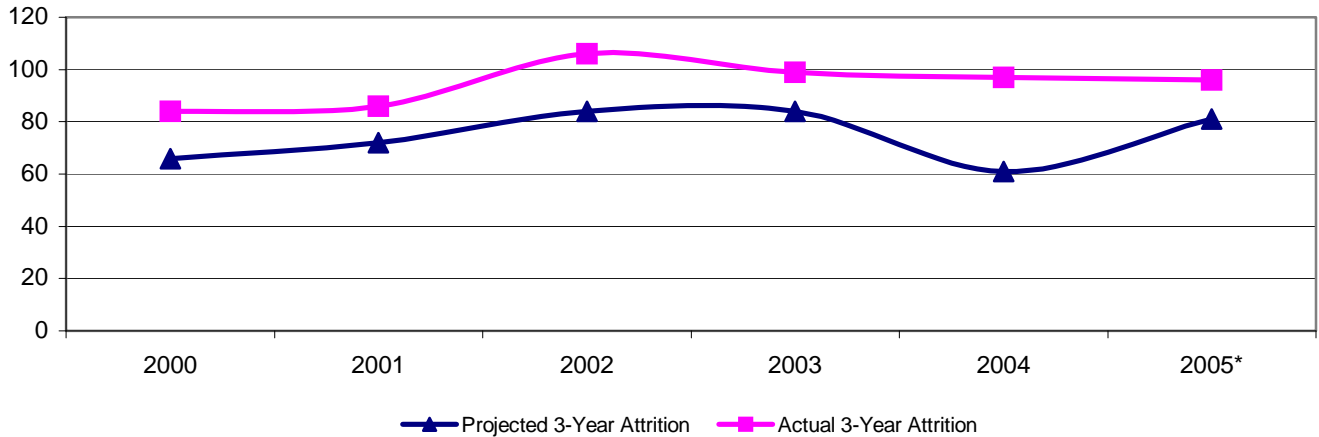
- ! The number who are projected to leave the field, and
- ! The accuracy of the projections.

In 2007, the VI consultants projected that 113 VI professionals would leave the field within the next 3 years. This means we can anticipate 13% of VI professionals will retire or move to another profession. Additionally, the expected growth of students means we will need an additional 80 FTEs statewide. In 2006, 57 VI teachers were projected to leave within 3 years. The new total of 87 VI teachers is a 53

Also of concern is the accuracy of the projection. This information has been collected since 2000. A comparison of the real vs. projected attrition reveals a disturbing trend. On average, there is a 21% margin-of-error. That is, the VI professionals have *underestimated* attrition by 21.6% on average. Applying this margin of error indicates that the real projected attrition is likely to be between 113 and 137 VI professionals.

The actual loss in the most recent and complete 3-year cycle of data (2005 -2007) shows the projection was short by 15% or 36 people. This is a significant difference in a field where each year only 48-50 new VI professionals complete training programs. It may take one to two years to recruit a candidate, and another one to two years to get that person trained.

Comparison of Actual vs. Projected 3-Year Attrition



* 2005 was the last year for which there is a complete set of data available.

Direct service from ESCs

Each regional service center (ESC) provides an array of services to districts. All ESCs provide leadership and/or technical assistance in visual impairments. Some regions provide direct services to students with visual impairments; the ESC staff is listed on the IEP. Fourteen regions provide O&M services, assisting a total of 273 students. Of those 14 ESCs, four regions provide VI services to an additional 203 students and both VI and O&M services to 96 students. The number of ESCs providing direct services increased this year from 12 to 14. Changes in regions providing direct services are typically a reflection have decreased district capacity and/or increased ESC capacity.

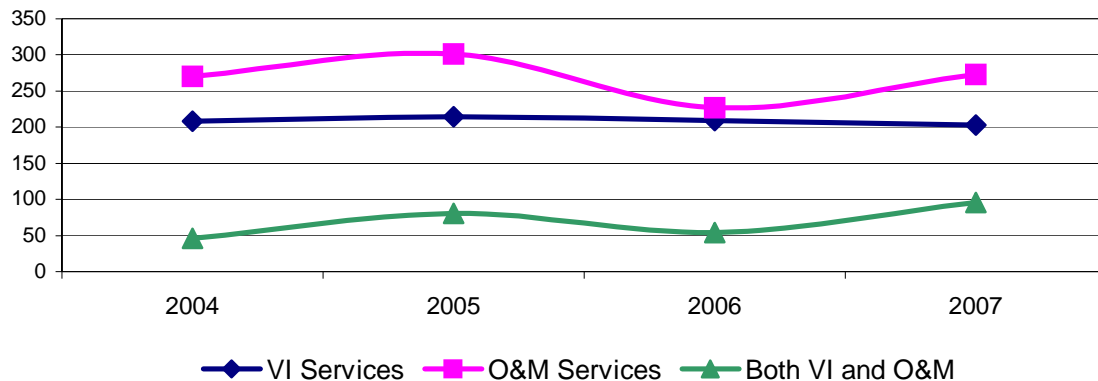
The increase in direct services from ESCs may reflect:

- Increased ESC capacity, and/or
- Diminished district capacity

Students receiving services from ESCs

	2005	2006	2007
VI- only services	214	209	203
O&M-only services	301	227	273
Both VI and O&M	81	54	96
Total	596	490	524

Students Receiving Services from ESCs



Cultural diversity

Texas is a diverse state and needs a diverse workforce. This survey asks about African-American, Hispanic, and Asian VI professionals. It also queries the number of Spanish-speaking VI professionals. The results are listed below.

Hispanic VI professionals

	2005	2006	2007
VI teachers	55	64	63
O&M specialists	7	5	9
Dually certified	5	4	8
Total	67	73	80

Spanish-speaking VI professionals

	2005	2006	2007
VI teachers	56	65	68
O&M specialists	7	6	14
Dually certified	8	9	10
Total	71	80	92

African-American VI professionals

	2005	2006	2007
VI teachers	10	10	17
O&M specialists	11	12	10
Dually certified	3	2	1
Total	24	24	28

Asian VI professionals

	2005	2006	2007
VI teachers	3	6	4
O&M specialists	0	1	0
Dually certified	0	0	0
Total	3	6	4

In September 2007 there were only 17 VI teachers, 10 O&M specialists, and one dually certified professional who are African-American. The Hispanic VI professionals included 63 VI teachers, nine O&M specialists and four dually certified professionals. Sixty-eight VI teachers, 14 O&M specialists and 10 dually certified professionals speak Spanish. The change in the cultural diversity of VI professionals statewide was very mixed. The number of African American VI teachers increased from 10 to 17 this year, but the O&M specialists and dually certified specialists decreased; yielding an overall growth of four African-American VI professionals. Meanwhile the pattern for the Hispanic VI professionals was reversed, with the number of VI teachers decreasing (from 64 to 63) and the O&M specialists and dually certified specialists increasing for an overall increase of seven Hispanic VI professionals (growing from 73 to 80). While the number of VI professionals has increased significantly since 1996, providing students with professionals that represent the state’s cultural diversity still remains a challenge.

Anticipated Need

Interpreting and understanding need relies on several factors. Typically these include the number of posted positions, recommendations from knowledgeable professionals and recommended student/teacher ratios. Below are data from each of these areas.

Posted positions

The respondents at each ESC and at TSBVI were asked how many part- and full-time positions were posted in their regions or at TSBVI in September. This data was collected in October after all regular hiring for the academic year has been completed. These positions remained unfilled and active, or were developed after the start of the school year. The figures reflect postings for part- and full-time staff.

Posted positions

	2005	2006	2007
VI teachers	16	25	27
O&M specialists	7	6	4
Dually certified	1	1	1
TOTAL	24	32	32

Over time the number of posted positions has not showed a significant change. Research completed in 1997, 2001, and 2005 (Dignan, TSBVI) indicated that special education administrators are willing to advocate for new or additional VI professionals based on their confidence that they can fill the positions. In other words, if administrators are confident they can fill a position, they will post one.

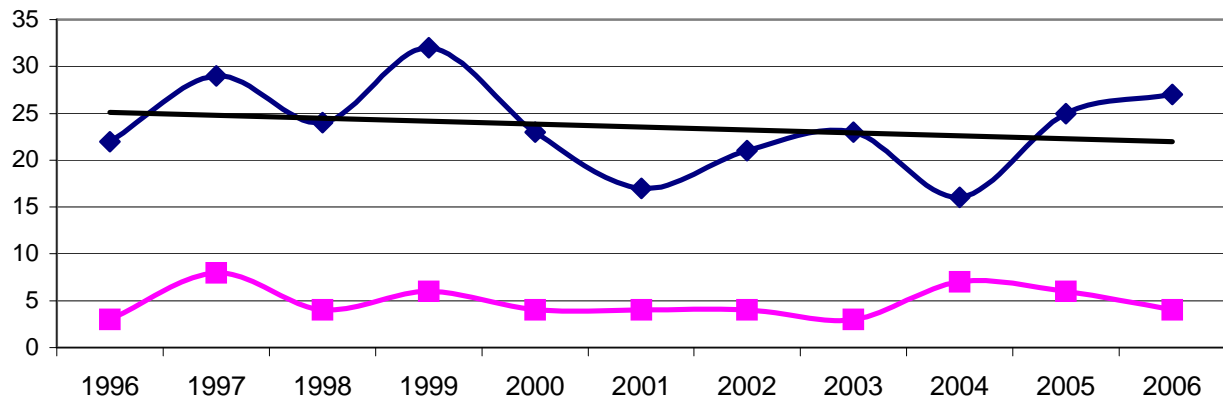
The table below shows the posted level of need since 1996. Statistically, the trend of having unfilled posted positions in September is reducing. This may be due to various factors:

- ! Directors are better able to recruit from within and enroll the candidate in a training program,
- ! Directors are able to recruit candidates prior to the start of the school year
- ! Directors are not confident they will be able to fill a position, so they are reluctant to advocate for or post a new position.

Regardless of the reason, the numbers should not be considered without reflecting on the total number of VI professionals. In 1996 the unfilled postings were similar to 2007. In 1996 there were postings for 7 O&M specialists and 23 VI teachers. In 2007 there were 4 official O&M openings and 27 positions for VI teachers. In that same period, the total number of VI professionals (VI teachers and O&M specialists) has risen from 507 to 857, an 85% increase in VI professionals. The percentage of unfilled positions is declining overall.

Furthermore, each year approximately 50 individuals complete training. All have jobs waiting for them, either new positions or positions that have been vacated the year before. For all of these reasons, this has not been a good indicator of true need for VI professionals.

Posted Positions for VI Professionals



◆ VI teacher postings ■ O&M specialist postings — Trend over time (VI teachers)

Recommendations by knowledgeable professionals

VI consultants were asked how many VI teachers, O&M specialists, and dually certified personnel were needed in their region, in addition to those already in training. Regional VI consultants are considered to be experts in the needs of their region. The results are indicated in the table below.

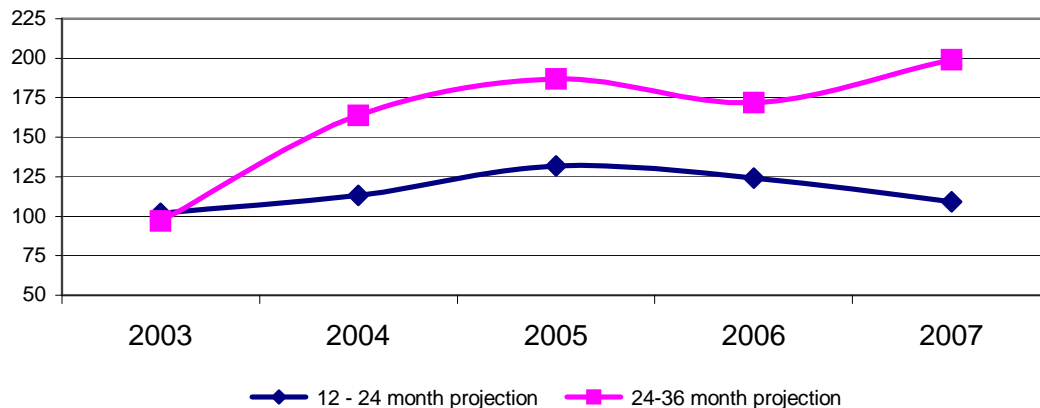
Short-term Need: 12 – 24 months

	2005	2006	2007
VI teachers	85	76	68
O&M specialists	32	32	23
Dually certified	15	16	18
Total Need	132	124	109

Longer-term Need: 24-36 months

	2005	2006	2007
VI teachers	104	110	133
O&M specialists	50	32	40
Dually certified	33	25	26
Total Need	187	172	199

Projected Need for VI Professionals

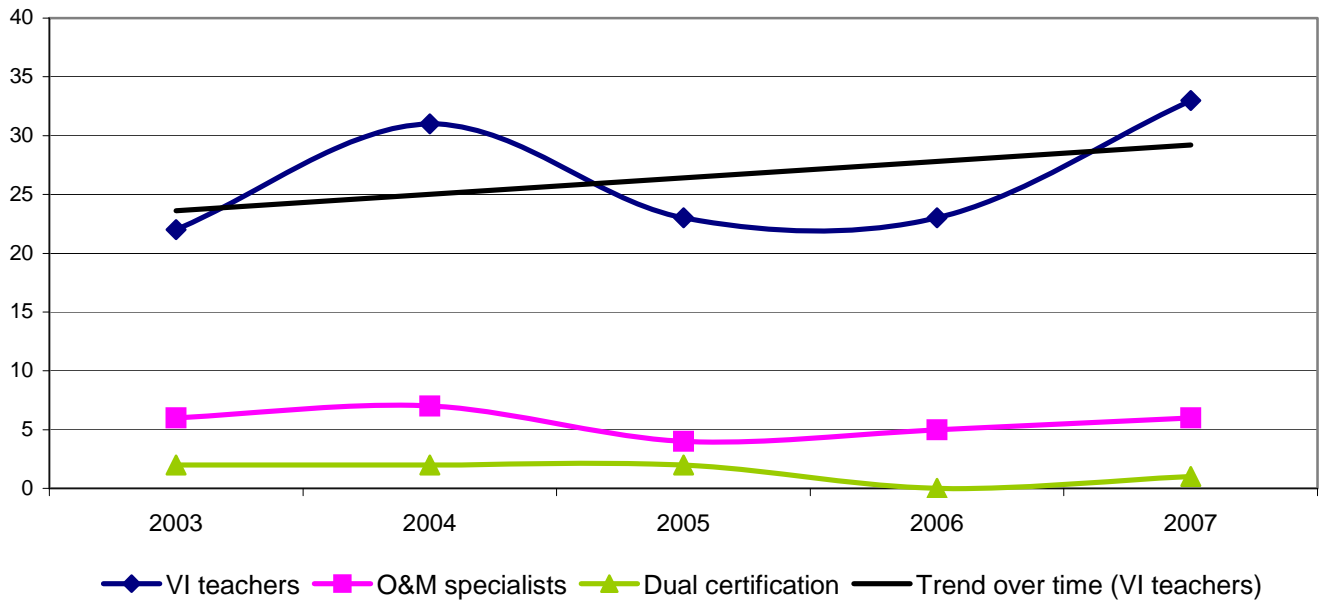


When considering the needs, VI consultants are advised to reflect on real attrition and anticipated attrition (those who are expected to permanently leave the field).

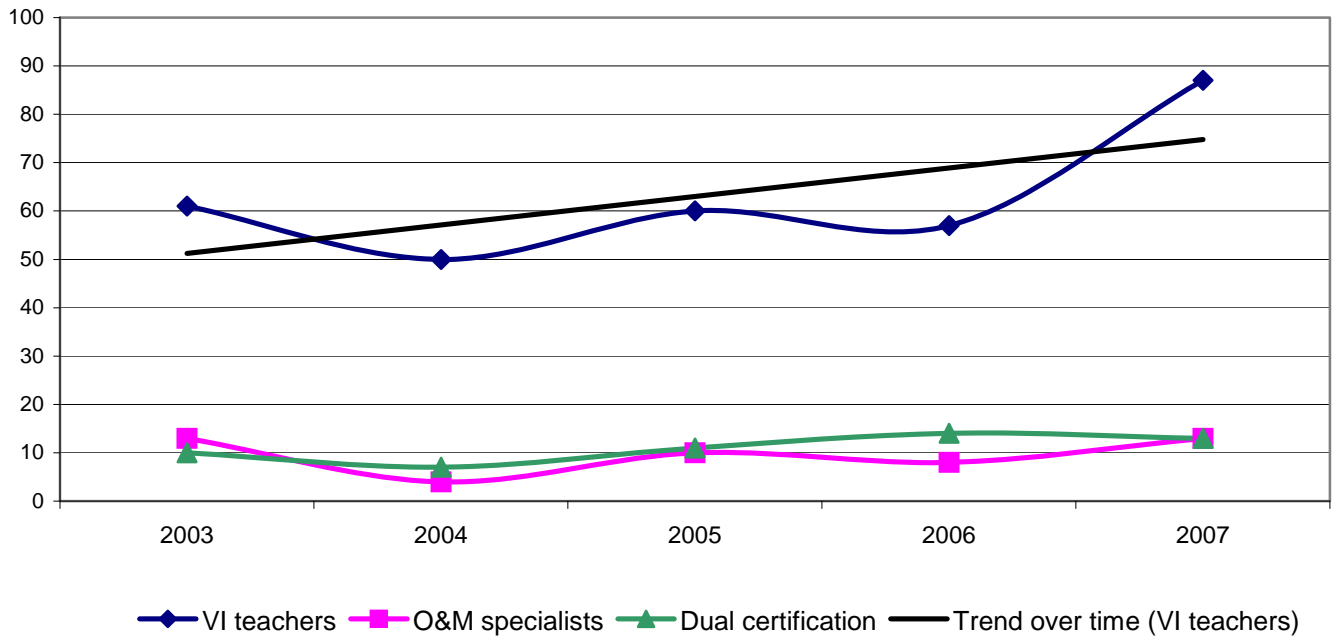
It is helpful to review the longer-term need (24-36 month) in conjunction with the 3-year actual and the projected attrition. While the numbers do vary from year to year in each domain, adding a statistical trend line can be helpful in evaluating the changes over time.

Below are tables showing attrition within the past year, projected attrition, and longer-term (36 months) need. The O&M and dually certified data remains essentially the same, showing little significant changes from year to year. As a result, no trendline was developed for these groups. However the VI teacher data shows changes. Notice how the trend lines for VI teachers have a similar slope, indicating increasing need.

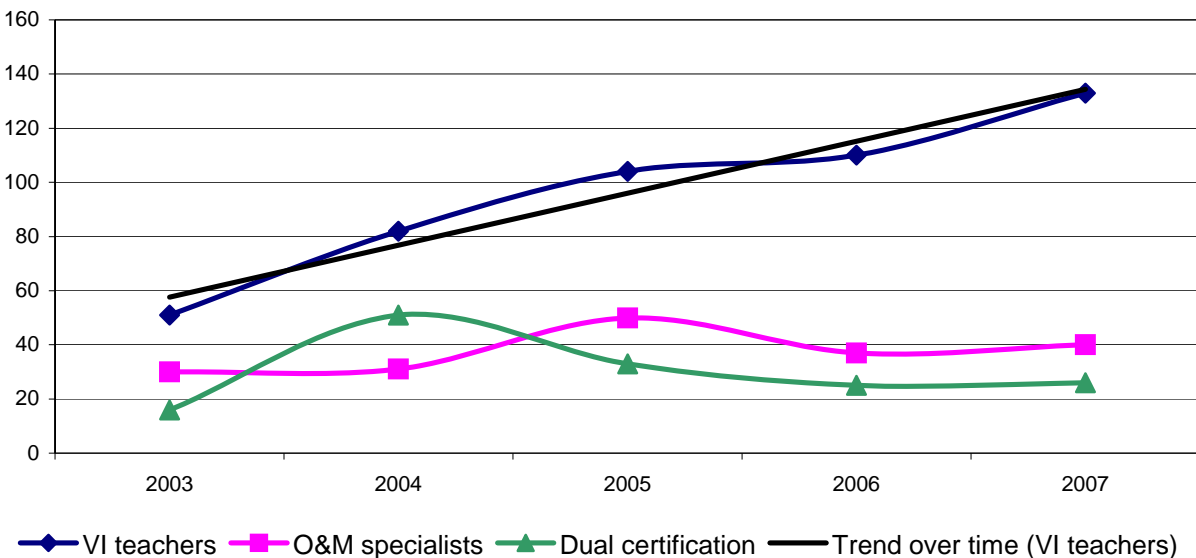
One-year Attrition



Projected 3-Year Attrition



Projected 36 Month Need for VI Professionals



The lack of change in O&M specialist data is noteworthy. At this point, there are no reliable statistical projections on the percentage of students with visual impairments who likely need O&M services. Nor do all students with visual impairments even receive O&M evaluations. In fact, according to the data gathered from the 2007 *Annual Registration of Students with Visual Impairments*, only 47% of visually impaired students were evaluated for O&M skills within the previous 3 years. Therefore, it is difficult to evaluate the lack of growth in reported need for O&M specialists (including dually certified professionals) based on data.

Recommendations using a caseload formula

The American Foundation for the Blind's *Program Planning and Evaluation for Blind and Visually Impaired Students: National guidelines for educational excellence* (1989), and the *National Plan for Training Personnel to Serve Children with Blindness and Low Vision* (2000) recommends that caseloads for VI teachers and O&M specialists be restricted to 8 – 12 students per full-time equivalent (FTE) position.

VI teachers

In January 2007 there were 7,967 students with visual impairment in Texas identified on the *Annual Registration of Students with Visual Impairments*. Based on that figure, and in light of the suggested 8 – 12 students per teacher ratio, Texas has a need for between 664 and 996 full-time equivalent direct service VI teachers. Currently there are 549.5 full-time equivalent (FTE) VI teachers. Therefore using this measure, Texas is lacking between 114 and 446 (FTE) VI teachers. (The mean of this range is 280 FTEs.)

This does not accommodate for the number of *individuals* needed. Approximately 23.6% of the VI teacher workforce is employed as a VI teacher on a part-time basis. (Of the 147 part-time VI teachers, 31 are dually certified; the remaining either contract with the district or are employed in some other capacity.) The number of *individuals* needed to fill 280 FTE positions would be *much* higher. Based on current ratios, the number of individuals needed is closer to 346 full- and part-time VI teachers.

O&M specialists

Determining the need based on a comparison of the data for orientation and mobility services is more complicated. According to the American Foundation for the Blind, 8 - 12 students is the recommended caseload for O&M specialists. However, not all students need O&M services each year.

According to the *Annual Registration of Students with Visual Impairments*, 2,413 students were receiving O&M services in January of 2007. If we assume that all students who would benefit from O&M currently receive it, and base the calculations on the suggested 8 –12 students per teacher ratio, Texas has a need for between 201 and 302 full-time equivalent O&M specialists. With 163 full-time equivalent (FTE) O&M specialists, Texas is lacking between 38 and 139 (FTE) O&M specialists. (The mean of this range is 88 FTEs.) However it must be noted that, given the shortage cited above, not all students who could benefit from O&M are receiving instruction.

The impact of part-time O&M specialists is more significant than for VI teachers. Approximately 48.4% of the O&M specialists in Texas provide services on a part-time basis. These individuals may be dually certified or private contractors, working with other districts or the Division for Blind Services (DBS). Therefore, even the lowest estimated need for 88 O&M specialists should be considered *very* conservative. The number of *individuals* needed to fill 88 FTE positions would be *much* higher. Based on current ratios, the number of individuals needed is closer to 131 full- and part-time O&M specialists.

VI professionals needed based on caseload formula (Mean of range)

	2005	2006	2007
VI teachers	268	296	280
O&M specialists	65	97	88

Summary

This report reviewed characteristics of, and indicators of need for VI professionals. In September 2007, Texas had 857 individuals providing vision-related services, either directly to students or in a leadership and/or technical assistance capacity. After adjusting for dually certified professionals (72) there are 802 individuals providing direct-service either on a full- or part-time basis. The total includes the following full-or part-time individuals:

- 623 VI teachers (549.5 FTEs)
- 215 O&M specialists, (163)
- 72 dually certified professionals.

In addition, there are:

- 55 leadership/technical assistance specialists (or 41.9 FTEs)

The cultural diversity of VI professionals is changing, yet still not keeping pace with the student population in Texas. From a diversity standpoint, VI professionals are not representative of the student population. This year there was an increase in:

- African-American VI teachers,
- Hispanic O&M and dually certified VI professionals, and
- Spanish-speaking VI professionals (all categories).

However, there was a slight decline in:

- Hispanic VI teachers,
- African-American O&M and dually certified specialists, and
- Asian VI professionals

An examination of the attrition, projected attrition and new positions being created indicates challenges lie ahead. The number of new positions is not keeping pace with student growth. The attrition rate increased this year from 28 to 40 VI professionals. The projected 3-year attrition rate also jumped from 79 to 113, or 13% of the total population of VI professionals.

This report included the number of “posted” positions in September. However, for VI professionals based on 11 years of data collection, this is not considered a reliable or accurate indicator of need. The numbers are too low to be reliable and have proven to be a poor predictor of need. Data and experience indicates that posting and hiring practices are directly related to confidence that a position can be filled. These data are valuable as a crude indicator that a need exists even after the start of the school year.

Relying solely on use of a formula also poses problems. Formulas address only full-time equivalent positions. In Texas, use of part-time or dually certified personnel is a valuable option for serving children with visual impairments. Sole reliance on a method that only measures FTEs does not address

the need for part-time or dually certified VI professionals. Part-time and dually certified VI professionals increase the flexibility of local staff and may assist students in getting more frequent service.

This report considers the recommendations of the VI specialists at the regional service centers and the need identified by special education administrators to be the best indicators of real need in Texas. These professionals have extensive knowledge of their districts and region.

Comparison of Methods for Determining Need

Method for determining need	VI teachers	O&M specialists	Dually certified	Total Needed
Posted vacancies (full- and part-time)	27 individuals	4 individuals	1 individuals	32 individuals
Regional VI consultant recommendations: 12-24 months	68 individuals	23 individuals	18 individuals	109 individuals
Regional VI consultant recommendations: 24-36 months	133 individuals	40 individuals	26 individuals	199 individuals
Caseload formula	280 FTEs	88 FTEs	Not applicable	369 FTEs

Three indicators of need were reviewed in this document: posted vacancies, recommendations by regional consultants, and caseload formulas. All provided very different data. While each source reveals a different set of numbers, what is clear is that regardless of the method used, Texas has a clear and ongoing need for VI professionals.

It is apparent that Texas has a clear and significant need for new and additional VI professionals that will continue to grow. In addition to need based on expected growth, it is anticipated that at least 13% of all VI professionals will be leaving the field within the next 3 years. These needs must be filled to ensure that students with visual impairments have the skills to succeed.

Appendix

Methodology

The survey asked about the number of people *functioning* as VI professionals. These individuals may be VI teachers, 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 educational service centers (ESCs) or Texas School for the Blind and Visually Impaired (TSBVI). Those in leadership or technical assistance roles may be full- or part-time capacity.

Texas employs both full- and part-time VI professionals. Full-time professionals are those who work .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 workforce (23.6% of the VI teachers and 48.4% of the O&M specialists).

When relevant, information about full-time equivalent (FTE) positions is also presented. The number of full-time equivalent (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, which is a combination of VI teachers and O&M professionals. Data on each profession is also included separately. When appropriate, data on dually certified VI professionals is also presented.

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

For more information about this survey or other issues related to personnel recruitment contact:

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