

Workforce Solutions

Capital Area Healthcare Industry Analysis

REPORT 1: WORKFORCE SUPPLY & DEMAND ANALYSIS

EXECUTIVE SUMMARY

JUNE 2018





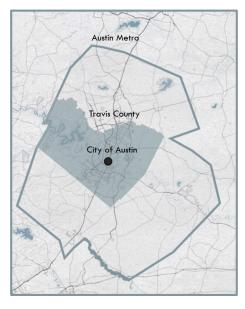
ABOUT THE CAPITAL AREA HEALTHCARE INDUSTRY ANALYSIS



Travis County lies at the heart of one of the country's best performing economies. During the past five years, employment in Travis County and the broader Austin region has increased at twice the national rate of growth. Since 2012, employers in the Austin region have added nearly 170,000 jobs, more than 70% of which have been located within Travis County. During this period, the Healthcare industry grew by 16,000 workers and was one of the largest job creators in the region.

Given the expected strong demand for Healthcare workers, especially among middle-skill jobs, it is crucial that the region possess a pipeline capable of producing the talent necessary for growth. The Workforce Solutions Capital Area Workforce Board has collaborated with several regional healthcare workforce development stakeholders to launch a new workforce initiative known as the Central Texas Healthcare Partnership. In support of this effort and with funding from the Texas Workforce Commission's Texas Industry Partnership program, the Board commissioned the following Healthcare Industry Analysis to better understand the supply and demand dynamics related to high-demand, middle-skill healthcare careers.

Although Travis County is the ultimate focus of the following analysis, the community's labor force extends beyond its borders. According to the US Census Bureau, for example, approximately 45% of all workers in Travis County live elsewhere. College students display a similar level of geographic fluidity, with many graduates from schools outside of Travis County eventually becoming part of the local workforce. To ensure that the analysis reflects this reality, the Healthcare Industry Analysis is conducted for the entire Austin metropolitan area.



The Board commissioned the **Healthcare Industry Analysis** to better understand the labor market landscape and discover potential strategies to increase alignment between regional supply and demand for middle-skill healthcare careers. Early convenings of the Central Texas Healthcare Partnership found that middle-skill healthcare occupations are of particular concern in the region. **Report 1** provides quantitative validation of those findings by determining the makeup of the region's labor force and identifying the occupations that are thriving and those that are undersupplied.









S*David's HealthCare

WORKFORCE SUPPLY-DEMAND GAPS: VOLUME

Regional talent ecosystems thrive when local skills production is aligned with the labor demand. The Workforce Supply and Demand Analysis examines the current ability of local post-secondary institutions within the Austin metro Region to meet the needs of local employers. In this analysis we identify occupations expected to fuel local employment gains in the years ahead as well as the number of locally-awarded post-secondary degrees in aligned fields and identify occupations with potential future shortages—or at least those where the supply of local graduates is insufficient to meet projected demand.

This analysis views the gaps between available workforce through two dimensions: **Volume** and **Supply Ratio.**

 <u>Volume</u> measures the number of job openings minus the number of graduates from local training programs. The largest volume gaps in the region are <u>Nursing Aides</u>, <u>Registered Nurses</u>, and <u>LPN/LVNs</u>.

GAPS BETWEEN SUPPLY AND DEMAND MIDDLE-SKILL HEALTHCARE OCCUPATIONS*

Largest Gaps	Nursing Aide, Orderlies & Attendants	Registered Nurses
Moderate Gaps	 LPN/LVN Medical Assistants Dental Assistants Pharmacy Technicians/Aides Dental Hygienists 	 Ophthalmic Medical Technicians Medical Records & Health Information Technicians Phlebotomists
Smallest Gaps	 Physical Therapist Assistants Surgical Technologists Radiologic/Nuclear Technologists & Therapists Medical & Clinical Laboratory Technicians 	 Cardiovascular Technologists & Technicians** Occupational Therapy Assistants Magnetic Resonance Imaging Technologists** Respiratory Technicians & Therapists
Oversupply	Diagnostic Medical Sonographers	

^{*} Occupations for which there was insufficient data not listed

^{**} Small gap, but severely undersupplied

WORKFORCE SUPPLY-DEMAND GAPS: SUPPLY RATIC

• The Ratio measures the number of graduates versus the demand for jobs. The most severely undersupplied as a share of demand (less than 20%) are Ophthalmic Medical Technicians, Dental Hygienists, Cardiovascular Technologists and Technicians, and Magnetic Resonance Imaging Technologists.

Taking these two measures into consideration allows an understanding of both the occupations with the largest gaps and those with the most severe undersupply ratio, without discounting occupations that may be a smaller, but still critical field within healthcare. Below, these two measures are combined. Bolded occupations indicate that the gap between supply and demand is at least 50 jobs annually. Within the five ratio groups, occupations are sorted according to the volume gap.

TI	he follo	wing pages provide more detailed information	on each of the below occupations.
	SEVERE SHORTAGE	 Dental Hygienists Ophthalmic Medical Technicians 	 Cardiovascular Technologists & Technicians Magnetic Resonance Imaging Technologists
OVER/UNDERSUPPLY RATIO	SHORTAGE	 Nursing Aide, Orderlies & Attendants Registered Nurses Licensed Practical/Vocational Nurses Dental Assistants 	 Pharmacy Technicians/Aides Phlebotomists Physical Therapist Assistants Occupational Therapy Assistants
IDERSUPE	MODERATE SHORTAGE	 Medical Assistants Medical Records & Health Information Technicians Surgical Technologists 	 Radiologic/Nuclear Technologists & Therapists Medical & Clinical Laboratory Technicians Respiratory Technicians & Therapists
OVER/UN	SURPLUS	Diagnostic Sonographers	
	UNKNOWN	 Home Health Aides Psychiatric Aides Emergency Medical Technicians & Paramedics 	 Psychiatric Technicians Medical Transcriptionists Occupational Therapy Aides

SUPPLY-DEMAND CONDITIONS



Occupation Group Edu. Level Annual Job Openings Completions Gap ## % of Jobs Nursing Aide, Orderlies & Attendants Certificate 1,631 332 1,299 20% Registered Nurses Assoc>Bach 1,625 514 1,111 32% Licensed Practical and Licensed Vocational Nurses Certificate 534 155 379 29% Medical Assistants Certificate 745 475 270 64% Dental Assistants Certificate 350 90 260 26% Pharmacy Technicians/Aides Certificate 330 81 249 25% Dental Hygienists Associate's 190 13 177 7% Ophthalmic Medical Technicians Certificate 258 142 116 55% Phlebotomists Certificate 258 142 116 55% Physical Therapist Assistants Associate's 136 49 87 36% Surgical Technologists & Therapists Associate's						
Registered Nurses Assoc>Bach 1,625 514 1,111 32% Licensed Practical and Licensed Vocational Nurses Certificate 534 155 379 29% Medical Assistants Certificate 745 475 270 64% Dental Assistants Certificate 350 90 260 26% Pharmacy Technicions/Aides Certificate 330 81 249 25% Dental Hygienists Associate's 190 13 177 7% Ophthalmic Medical Technicians Certificate 141 5 136 4% Medical Records and Health Information Technicians Certificate 258 142 116 55% Physical Therapist Assistants Associate's 136 49 87 36% Surgical Technologists Certificate 98 50 48 51% Radiologic/Nuclear Technologists & Therapists Associate's 160 113 47 71% Medical and Clinical Laboratory Technicians A	Occupation Group	Edu. Level	Annual Job Openings	Completions	Gap#	% of Jobs
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Medical Assistants Certificate 745 475 270 64% Dental Assistants Certificate 350 90 260 26% Pharmacy Technicians/Aides Certificate 330 81 249 25% Dental Hygienists Associate's 190 13 177 7% Ophthalmic Medical Technicians Certificate 141 5 136 4% Medical Records and Health Information Technicians Certificate 258 142 116 55% Phiebotomists Certificate 158 51 107 32% Physical Therapist Assistants Associate's 136 49 87 36% Surgical Technologists Therapists Associate's 136 49 87 36% Radiologic/Nuclear Technologists & Therapists Associate's 98 50 48 51% Medical and Clinical Laboratory Technicians Associate's 92 47 45 51% Cardiovascular Technologists and Technicians	Registered Nurses	Assoc>Bach	1,625	514	1,111	32%
Dental Assistants Certificate 350 90 260 26% Pharmacy Technicians/Aides Certificate 330 81 249 25% Dental Hygienists Associate's 190 13 177 7% Ophthalmic Medical Technicians Certificate 141 5 136 4% Medical Records and Health Information Technicians Certificate 258 142 116 55% Phlebotomists Certificate 158 51 107 32% Physical Therapist Assistants Associate's 136 49 87 36% Surgical Technologists Certificate 98 50 48 51% Radiologic/Nuclear Technologists & Therapists Associate's 160 113 47 71% Medical and Clinical Laboratory Technicians Associate's 92 47 45 51% Cardiovascular Technologists and Technicians Associate's 37 4 33 11% Occupational Therapy Assistants Associate	Licensed Practical and Licensed Vocational Nurses	Certificate	534	155	379	29%
Pharmacy Technicians/AidesCertificate3308124925%Dental HygienistsAssociate's190131777%Ophthalmic Medical TechniciansCertificate14151364%Medical Records and Health Information TechniciansCertificate25814211655%PhlebotomistsCertificate1585110732%Physical Therapist AssistantsAssociate's136498736%Surgical TechnologistsCertificate98504851%Radiologic/Nuclear Technologists & TherapistsAssociate's1601134771%Medical and Clinical Laboratory TechniciansAssociate's92474551%Cardiovascular Technologists and TechniciansAssociate's3743311%Occupational Therapy AssistantsAssociate's41142734%Magnetic Resonance Imaging TechnologistsAssociate's2131814%Respiratory Technicians & TherapistsAssociate's72571579%Diagnostic Medical SonographersAssociate's6480-16126%Home Health AidesCertificate1,113281,0853%Psychiatric AidesCertificate1662314314%Emergency Medical Technicians and ParamedicsCertificate540540%Medical TranscriptionistsCertificate540 </td <td>Medical Assistants</td> <td>Certificate</td> <td>745</td> <td>475</td> <td>270</td> <td>64%</td>	Medical Assistants	Certificate	745	475	270	64%
Dental Hygienists Associate's 190 13 177 7% Ophthalmic Medical Technicians Certificate 141 5 136 4% Medical Records and Health Information Technicians Certificate 258 142 116 55% Phlebotomists Certificate 158 51 107 32% Physical Therapist Assistants Associate's 136 49 87 36% Surgical Technologists Certificate 98 50 48 51% Radiologic/Nuclear Technologists & Therapists Associate's 160 113 47 71% Medical and Clinical Laboratory Technicians Associate's 92 47 45 51% Cardiovascular Technologists and Technicians Associate's 37 4 33 11% Cardiovascular Technologists and Technicians Associate's 41 14 27 34% Magnetic Resonance Imaging Technologists Associate's 21 3 18 14% Respiratory Technicians & Therapists Associate's 72 57 15 79% Diagnostic Medical Sonographers Associate's 64 80 -16 126% Home Health Aides Certificate 1,113 28 1,085 3% Emergency Medical Technicians and Paramedics Certificate 166 23 143 14% Psychiatric Technicians Certificate 54 0 54 Og% Medical Transcriptionists Certificate 54 Og% Medical Transcriptionists Certificate 38	Dental Assistants	Certificate	350	90	260	26%
Ophthalmic Medical Technicians Certificate 141 5 136 4% Medical Records and Health Information Technicians Certificate 258 142 116 55% Phlebotomists Certificate 158 51 107 32% Physical Therapist Assistants Associate's 136 49 87 36% Surgical Technologists Certificate 98 50 48 51% Radiologic/Nuclear Technologists & Therapists Associate's 160 113 47 71% Medical and Clinical Laboratory Technicians Associate's 92 47 45 51% Cardiovascular Technologists and Technicians Associate's 37 4 33 11% Cardiovascular Technologists and Technicians Associate's 41 14 27 34% Magnetic Resonance Imaging Technologists Associate's 41 14 27 34% Magnetic Resonance Imaging Technologists Associate's 72 57 15 79% Diagnostic Medical Sonographers Associate's Associate's Associate's 64 80 -16 126% Home Health Aides Certificate 1,113 28 1,085 3% Psychiatric Aides Certificate 316 0 316 0 348 Psychiatric Technicians Certificate 54 0 54 0 6% Medical Transcriptionists Certificate 54 0 38 0 38	Pharmacy Technicians/Aides	Certificate	330	81	249	25%
Medical Records and Health Information TechniciansCertificate25814211655%PhlebotomistsCertificate1585110732%Physical Therapist AssistantsAssociate's136498736%Surgical TechnologistsCertificate98504851%Radiologic/Nuclear Technologists & TherapistsAssociate's1601134771%Medical and Clinical Laboratory TechniciansAssociate's92474551%Cardiovascular Technologists and TechniciansAssociate's3743311%Occupational Therapy AssistantsAssociate's41142734%Magnetic Resonance Imaging TechnologistsAssociate's2131814%Respiratory Technicians & TherapistsAssociate's72571579%Diagnostic Medical SonographersAssociate's6480-16126%Home Health AidesCertificate1,113281,0853%Psychiatric AidesCertificate31603160%Emergency Medical Technicians and ParamedicsCertificate1662314314%Psychiatric TechniciansCertificate540540%Medical TranscriptionistsCertificate380380%	Dental Hygienists	Associate's	190	13	1 <i>77</i>	7%
PhlebotomistsCertificate1585110732%Physical Therapist AssistantsAssociate's136498736%Surgical TechnologistsCertificate98504851%Radiologic/Nuclear Technologists & TherapistsAssociate's1601134771%Medical and Clinical Laboratory TechniciansAssociate's92474551%Cardiovascular Technologists and TechniciansAssociate's3743311%Occupational Therapy AssistantsAssociate's41142734%Magnetic Resonance Imaging TechnologistsAssociate's2131814%Respiratory Technicians & TherapistsAssociate's72571579%Diagnostic Medical SonographersAssociate's6480-16126%Home Health AidesCertificate1,113281,0853%Psychiatric AidesCertificate31603160%Emergency Medical TechniciansCertificate1662314314%Psychiatric TechniciansCertificate540540%Medical TranscriptionistsCertificate380380%	Ophthalmic Medical Technicians	Certificate	141	5	136	4%
Physical Therapist Assistants Associate's 136 49 87 36% Surgical Technologists Certificate 98 50 48 51% Radiologic/Nuclear Technologists & Therapists Associate's 160 113 47 71% Medical and Clinical Laboratory Technicians Associate's 92 47 45 51% Cardiovascular Technologists and Technicians Associate's 37 4 33 11% Occupational Therapy Assistants Associate's 41 14 27 34% Magnetic Resonance Imaging Technologists Associate's 21 3 18 14% Respiratory Technicians & Therapists Associate's 72 57 15 79% Diagnostic Medical Sonographers Associate's 64 80 -16 126% Home Health Aides Certificate 1,113 28 1,085 3% Psychiatric Aides Certificate 316 0 316 0% Emergency Medical Technicians and Paramedics Certificate 166 23 143 14% Psychiatric Technicians Certificate 54 0 54 0% Medical Transcriptionists Certificate 38 0 38 0%	Medical Records and Health Information Technicians	Certificate	258	142	116	55%
Surgical Technologists Radiologic/Nuclear Technologists & Therapists Associate's Associate's Associate's Associate's P2 A7 A5 Cardiovascular Technologists and Technicians Associate's Associ	Phlebotomists	Certificate	158	51	107	32%
Radiologic/Nuclear Technologists & Therapists Associate's Medical and Clinical Laboratory Technicians Associate's Associate's 92 47 45 51% Cardiovascular Technologists and Technicians Associate's 37 4 33 11% Occupational Therapy Assistants Associate's 41 14 27 34% Magnetic Resonance Imaging Technologists Associate's Associate's 21 3 18 14% Respiratory Technicians & Therapists Associate's 72 57 15 79% Diagnostic Medical Sonographers Associate's 64 80 -16 126% Home Health Aides Certificate 1,113 28 1,085 3% Psychiatric Aides Certificate 316 0 316 0% Emergency Medical Technicians and Paramedics Certificate 166 23 143 14% Psychiatric Technicians Certificate 54 0 54 0 6% Medical Transcriptionists Certificate 38 0 38 0%	Physical Therapist Assistants	Associate's	136	49	87	36%
Medical and Clinical Laboratory TechniciansAssociate's92474551%Cardiovascular Technologists and TechniciansAssociate's3743311%Occupational Therapy AssistantsAssociate's41142734%Magnetic Resonance Imaging TechnologistsAssociate's2131814%Respiratory Technicians & TherapistsAssociate's72571579%Diagnostic Medical SonographersAssociate's6480-16126%Home Health AidesCertificate1,113281,0853%Psychiatric AidesCertificate31603160%Emergency Medical Technicians and ParamedicsCertificate1662314314%Psychiatric TechniciansCertificate540540%Medical TranscriptionistsCertificate380380%	Surgical Technologists	Certificate	98	50	48	51%
Cardiovascular Technologists and Technicians Associate's 37 4 33 11% Occupational Therapy Assistants Associate's 41 14 27 34% Magnetic Resonance Imaging Technologists Associate's 21 3 18 14% Respiratory Technicians & Therapists Associate's 72 57 15 79% Diagnostic Medical Sonographers Associate's 64 80 -16 126% Home Health Aides Certificate 1,113 28 1,085 3% Psychiatric Aides Certificate 316 0 316 0% Emergency Medical Technicians and Paramedics Certificate 166 23 143 14% Psychiatric Technicians Certificate 54 0 54 0% Medical Transcriptionists Certificate 38 0 38 0%	Radiologic/Nuclear Technologists & Therapists	Associate's	160	113	47	71%
Occupational Therapy Assistants Associate's 41 14 27 34% Magnetic Resonance Imaging Technologists Associate's 21 3 18 14% Respiratory Technicians & Therapists Associate's 72 57 15 79% Diagnostic Medical Sonographers Associate's 64 80 -16 126% Home Health Aides Certificate 1,113 28 1,085 3% Psychiatric Aides Certificate 316 0 316 0% Emergency Medical Technicians and Paramedics Certificate 166 23 143 14% Psychiatric Technicians Certificate 54 0 54 0% Medical Transcriptionists Certificate 38 0 38 0%	Medical and Clinical Laboratory Technicians	Associate's	92	47	45	51%
Magnetic Resonance Imaging Technologists Associate's Associate's Associate's 72 57 15 79% Diagnostic Medical Sonographers Associate's Associate's 64 80 -16 126% Home Health Aides Certificate 1,113 28 1,085 3% Psychiatric Aides Certificate 316 0 316 0% Emergency Medical Technicians and Paramedics Certificate 166 23 143 14% Psychiatric Technicians Certificate 54 0 54 0 38 0%	Cardiovascular Technologists and Technicians	Associate's	37	4	33	11%
Respiratory Technicians & Therapists Associate's Associate's Associate's Associate's 64 80 -16 126% Home Health Aides Certificate 1,113 28 1,085 3% Psychiatric Aides Certificate 316 0 316 0% Emergency Medical Technicians and Paramedics Certificate 166 23 143 14% Psychiatric Technicians Certificate 54 0 54 0 38 0%	Occupational Therapy Assistants	Associate's	41	14	27	34%
Diagnostic Medical Sonographers Associate's Certificate 1,113 28 1,085 3% Psychiatric Aides Certificate 316 Certificate 166 23 143 Psychiatric Technicians Certificate 54 Medical Transcriptionists Certificate 38 0 38	Magnetic Resonance Imaging Technologists	Associate's	21	3	18	14%
Home Health Aides Psychiatric Aides Certificate	Respiratory Technicians & Therapists	Associate's	72	57	15	79%
Psychiatric Aides Certificate 316 0 316 0% Emergency Medical Technicians and Paramedics Certificate 166 23 143 14% Psychiatric Technicians Certificate 54 0 54 0% Medical Transcriptionists Certificate 38 0 38 0%	Diagnostic Medical Sonographers	Associate's	64	80	-16	126%
Emergency Medical Technicians and Paramedics Psychiatric Technicians Certificate Certificate 54 Medical Transcriptionists Certificate 38 0 38 143 1496	Home Health Aides	Certificate	1,113	28	1,085	3%
Psychiatric Technicians Certificate 54 0 54 0% Medical Transcriptionists Certificate 38 0 38 0%	Psychiatric Aides	Certificate	316	0	316	0%
Medical Transcriptionists Certificate 38 0 38 0 %	Emergency Medical Technicians and Paramedics			23		
\$1000000000000000000000000000000000000	•		54	0	54	
Occupational Therapy Aides Certificate 9 0 9 0 %	Medical Transcriptionists		38	0	38	
	Occupational Therapy Aides	Certificate	9	0	9	0%

Severe Shortage
Shortage
20%
20<50%

Moderate Shortage

Surplus >100%

Unknown

SUMMARY OF FINDINGS



Travis County and the broader Austin region are blessed with numerous post-secondary institutions. Each year, these schools produce tens of thousands of graduates. In 2016, universities and colleges in the region produced approximately 4,500 post-secondary Healthcare graduates across all award levels, nearly 2,000 of which were at the Certificate (for-credit) or Associate's level. Still, healthcare graduate levels are far lower than US levels on a per capita basis across all degree levels.

The alignment between demand forecasts and local education and training graduates show one side of a workforce supply-demand analysis. Marrying this analysis with feedback from employer and education and training stakeholders allows us to see a clearer picture of the alignment for middle-skill healthcare occupations in the region. This analysis was able to validate many of the assumptions of the Board and the Partnership's initial work as well as add occupations to the list for additional exploration. Occupations of particular interest include:

- Nursing Assistants
- Nurses
- Dental Hygienists and Assistants
- Licensed Practical and Licensed Vocational Nurses
- Home Health Aides
- Ophthalmic Medical Technicians
- Pharmacy Aides and Technicians
- EMTs/Paramedics

Some strategies to expanding a healthy local workforce pipeline for these target middle skill occupations identified during this analysis include:

- Identifying solutions to education and training capacity issues. For example, career awareness and early intervention in career planning, referring students from at capacity program and/or institutions to those with additional capacity, increasing placement opportunities for clinical and internship programs, particularly for sub-baccalaureate programs.
- Determining career pathways from lower wage middle skill healthcare occupations to more sustainable ones. For example, some
 employers are working with education and training providers to upskill and increase access to additional credentials for incumbent
 workers
- Developing partnerships with both secondary and postsecondary education providers to share data on completions, enrollment, capacity.





