

GAP ANALYSIS

PROJECTING OVERALL SUPPLY & DEMAND FOR MID-LEVEL JOBS

WASHINGTON STATE
WORKFORCE TRAINING AND EDUCATION COORDINATING
BOARD

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Gap Analysis

- Annual review of projected balance between supply and demand for workers with mid-level skills.
 - Mid-level = Between one and four years of post-secondary education and/or training.
- Analyzes supply and demand across all mid-level occupations.
 - Analyses for specific high-demand fields to follow.

Methods

- Each year Workforce Board staff updates forecasted supply and demand for “mid-level” workers.
- Focus on the question of how many additional or “new” workers are likely needed six years ahead.
- Uses federal Bureau of Labor Statistics (BLS) definitions as starting point. Mid-level: Jobs requiring more than year of post-high school training or education, but less than bachelor’s degree.
- Forecast sums demand and supply across all mid-level occupations.

Methods-Supply

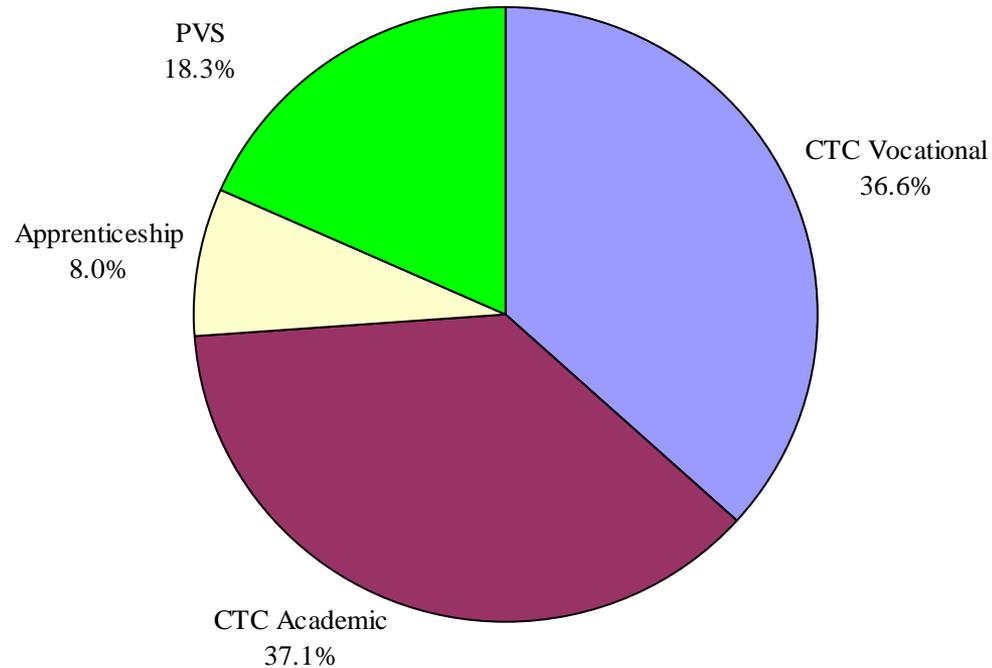
- Supply based on number of individuals who come out of the state's education and training system during the year with more than a year of relevant training, and do not proceed to further education.
- Aggregate supply includes participants from:
 - Apprenticeship programs.
 - Community and Technical Colleges programs.
 - Private Vocational School (PVS) programs.
- Not included: CTC academic transfers to other institutions.
- Also NOT included: Students leaving baccalaureate programs *before* completion who meet requirements for some mid-level occupations.

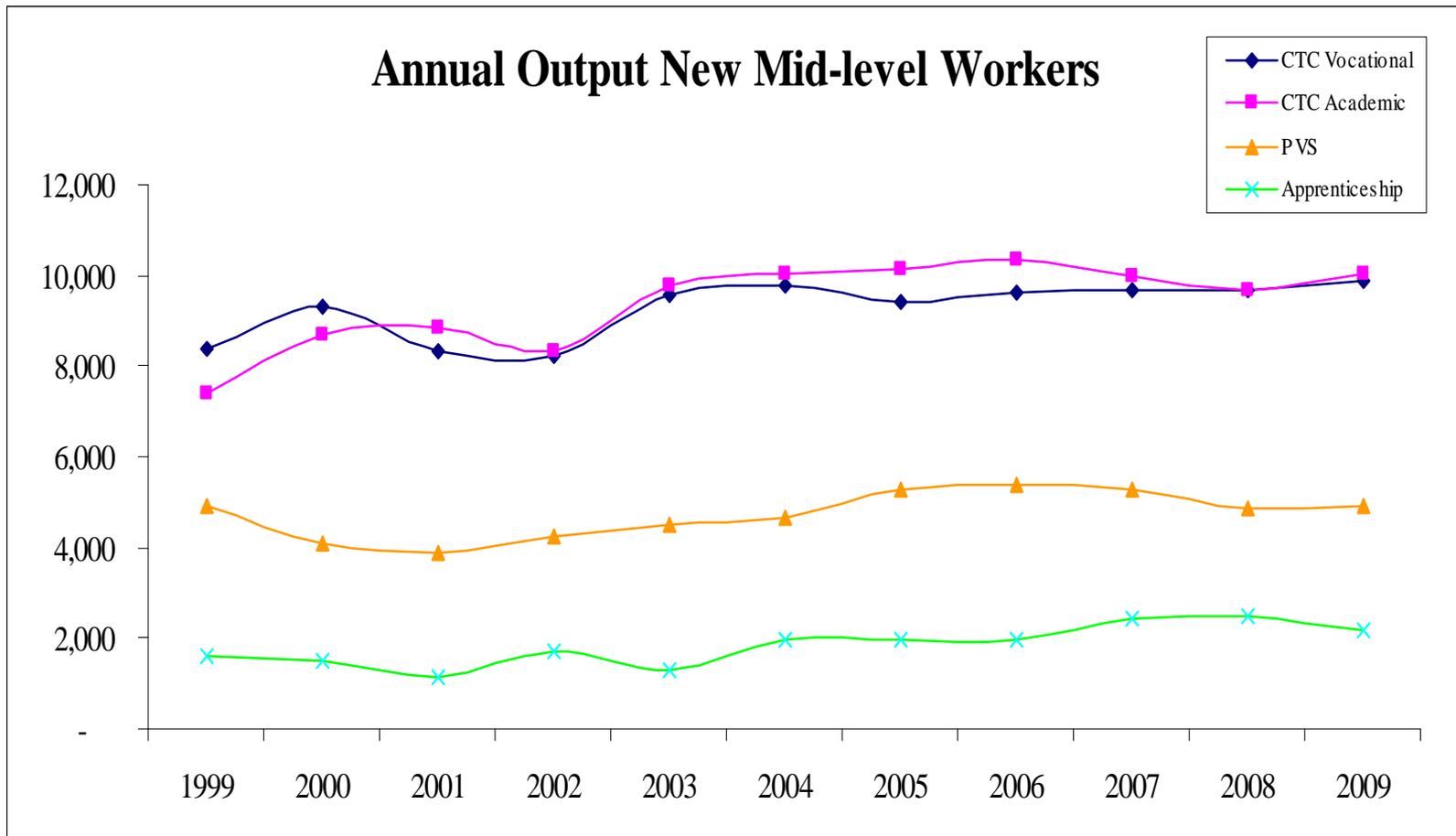
Note: For both non-transferring Academic CTC students and baccalaureate non-completers, there is imperfect match between skills acquired and most mid-level openings. As in prior estimates, all CTC Academic non-transfers included, but no estimated number of baccalaureate non-completers.

Methods-Demand

- Demand data uses BLS forecasts of projected “net openings” for mid-level jobs in Washington. Two ways to think of “net openings” count:
 1. Sum of increase in jobs *plus* number of workers who leave that occupation —e.g., retirement.
 2. Technically, the number of openings *minus* those openings filled by someone already working in that occupation.

Supply of Newly-Trained Mid-level Workers - 2009





Not included are CTC academic transfers to other institutions.

No large deviation from general long-term trends—aggregate supply about the same since 2005.

Effect of construction retraction on apprenticeship—had been growing proportionately faster than other programs in prior years

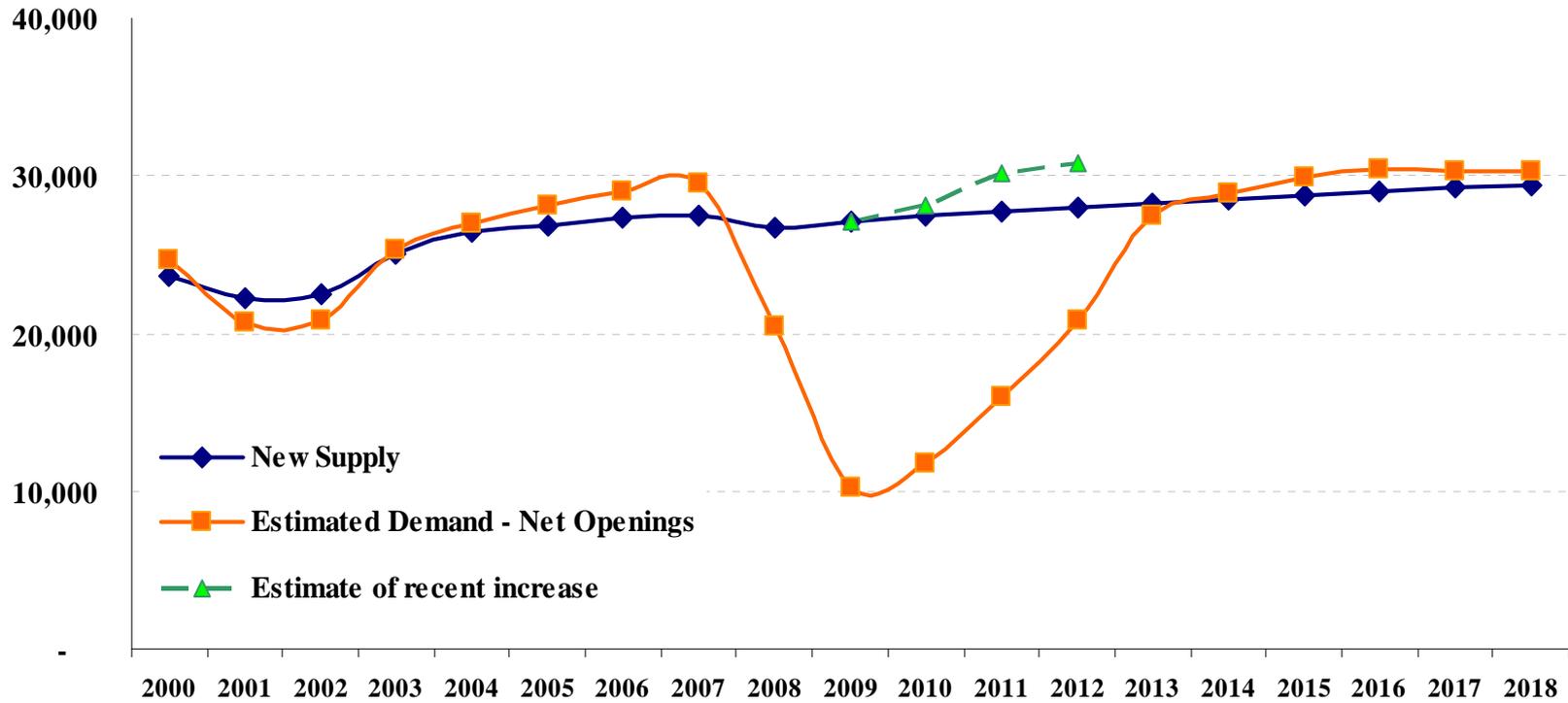
Recession Impact on Labor Demand

- Recessions are marked by near-term oversupply of labor, at least in some sectors. In a recession of this magnitude, labor oversupply exists in most occupations, across high, middle, and low skill levels.
- Unemployment can increase faster than job openings decline due to continued population growth. Delayed retirements can also contribute to this effect.

Projecting Future Supply

- Method to estimate future supply has been to project current supply forward, increasing with growth of training-age population.
- The recent increase in CTC enrollment has not yet showed in supply data. However, an approximation of the likely magnitude of the resulting increase has been included as an alternative projection.

Supply and Demand - Mid-level Workers



- Not surprisingly, mid-level skills are temporarily in oversupply.
- Demand is not projected to exceed supply until late in the recovery.
- There is some optimism in this prediction, because the model doesn't carry over accumulations of unemployed or under-employed workers.
- If the recent wave of additional CTC students continue their enrollments, it will be a significant increase in the mid-level worker supply.

Year	Supply	Demand	Demand Met	Demand Met, 6-year Forward	Mid-Level Gap, 6-year Forward
2000	23,610	24,610	96%		
2001	22,178	20,705	107%		
2002	22,481	20,801	108%		
2003	25,094	25,258	99%		
2004	26,399	27,026	98%		
2005	26,799	28,160	95%		
2006	27,300	28,977	94%		
2007	27,442	29,480	93%		
2008	26,744	20,473	131%		
2009	27,040	10,198	265%		
2010		11,778			
2011		15,978			
2012		20,877			
2013		27,466			
2014		28,904			
2015		29,885		90%	10%
2016		30,411		90%	10%
2017		30,337		91%	9%
2018		30,324		92%	8%

At the end of the recovery, a gap between the number of newly trained workers and net job openings reappears in the projection. This table shows the forecasted size of the gap, if supply is not increased beyond the 2009 trend level.

Policy Issues

Given the unusual conditions prevailing across labor markets during this major recession, relevant policy questions may include:

- How can we be efficient in using limited resources to support training at a time when the opportunity cost of training is very low, both to workers and to society?
- What are the policy implications of a prolonged period of supply exceeding demand for mid-level skilled workers?