INTRODUCTION

- President’s 2009 State of the Union Address:
  - Postsecondary attainment for every American

- Implicit in President Obama’s statement:
  - The US has lost its technological and educational leadership position;
  - This bodes poorly for the future economic strength and security of the US
FOUNDATION OF THE PROBLEM:

1. College for All
2. Privatization
3. Lack of shared social/educational responsibility
4. Technology
THE DETAILS:

- Student Dropouts
- Few students obtain marketable skills
- CTE credentials widely vary in quality & relevance
- No career advising
- No sense of mutual responsibility
- The college culture
### Career Plans of Entering Community College Students and Occupational Demand: Fall 2010

<table>
<thead>
<tr>
<th>Career Area Planned</th>
<th>Potential Supply</th>
<th>Demand</th>
<th>% of Demand Met</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distribution and dispatching</td>
<td>44</td>
<td>1,284</td>
<td>3%</td>
</tr>
<tr>
<td>Communications and records</td>
<td>1,348</td>
<td>24,553</td>
<td>5%</td>
</tr>
<tr>
<td>Construction and maintenance</td>
<td>2,049</td>
<td>33,418</td>
<td>6%</td>
</tr>
<tr>
<td>Manufacturing and processing</td>
<td>1,153</td>
<td>11,158</td>
<td>10%</td>
</tr>
<tr>
<td>Marketing and sales</td>
<td>2,890</td>
<td>21,763</td>
<td>13%</td>
</tr>
<tr>
<td>Mechanical and electrical specialties</td>
<td>2,556</td>
<td>11,541</td>
<td>22%</td>
</tr>
<tr>
<td>Transport operations</td>
<td>438</td>
<td>1,148</td>
<td>38%</td>
</tr>
<tr>
<td>Management</td>
<td>13,278</td>
<td>19,185</td>
<td>69%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>23,756</strong></td>
<td><strong>124,050</strong></td>
<td><strong>19%</strong></td>
</tr>
</tbody>
</table>

*Note: Data are drawn from all high school seniors who took the ACT and enrolled in a community college, fall 2010. Cited in ACT (2012).*
Community College Areas of Study With The Largest Shortages: 2009–2010

<table>
<thead>
<tr>
<th>Area of Study</th>
<th>Supply</th>
<th>Demand</th>
<th>% of Demand Met</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction trades</td>
<td>19,414</td>
<td>147,357</td>
<td>13%</td>
</tr>
<tr>
<td>Transportation and materials moving</td>
<td>16,280</td>
<td>73,929</td>
<td>22%</td>
</tr>
<tr>
<td>Business, management, marketing, and related support</td>
<td>106,043</td>
<td>319,314</td>
<td>33%</td>
</tr>
<tr>
<td>Science technologies/technicians</td>
<td>2,103</td>
<td>5,931</td>
<td>35%</td>
</tr>
<tr>
<td>Mechanics and repair technologies</td>
<td>50,977</td>
<td>111,788</td>
<td>45%</td>
</tr>
<tr>
<td>Precision production</td>
<td>23,652</td>
<td>47,925</td>
<td>49%</td>
</tr>
<tr>
<td>Legal professions and studies</td>
<td>7,242</td>
<td>9,596</td>
<td>75%</td>
</tr>
<tr>
<td>Health professions and related programs</td>
<td>241,771</td>
<td>191,262</td>
<td>125%</td>
</tr>
<tr>
<td>Total</td>
<td>467,482</td>
<td>907,102</td>
<td>51%</td>
</tr>
</tbody>
</table>

Note: Data are drawn from all high school seniors who took the ACT and enrolled in a community college, fall 2010. Cited in ACT (2012).
College Completion Rank Declining: Percentage of 25- to 34-year-olds with an Associate Degree or Higher, 2007

Source: Organization for Economic Cooperation and Development.
OPPORTUNITY

- Substantial momentum to create CTE model that works
- Enormous change agenda throughout US educational sector
- Community Colleges are being especially creative
- Increasing engagement of Employers, Community and Foundations
- Alamo Colleges Examples at end of presentation
The American Dream is at risk:

- Community Colleges can reclaim the Dream but must:
  - Dramatically redesign our colleges
  - Redesign students’ educational experiences

Redesign Proposals:
PURPOSE:

- Sharply focusing career and technical education on preparing students with the knowledge and skills necessary for existing and future jobs in regional and global economies.
STRATEGIES:

- Design coherent career pathways leading to stackable, multilevel, industry recognized credentials
  - Develop technology-based tools that will help local colleges access available labor market data to identify and monitor skills gaps in their regions;
  - Mobilize powerful local, regional, and national partnerships involving community colleges, employers, and government agencies;
  - Ensure employers value the associate degree as a desired employment credential;
STRATEGIES:

- Establish alternative models for completing skills-based credentials, including classroom instruction, online learning, credit for prior learning, and on-the-job learning;
- Develop a national credentialing system
BE RESPONSIVE

- Create responsive internal organizations;
- Redesign/reinvent our business model and engagement with employers;
- Address the pipeline beginning in middle school; share in advising and college readiness;
- Provide access for workers left behind;
- Determine core and soft skills required by employers; build in credentials (badges);
- Build competency-based, applied learning models
DEFINE 21ST CENTURY SKILLS

- Thinking critically and managing the barrage of information;
- Solving complex, multidisciplinary, open-ended problems that all workers face routinely;
- Creativity and entrepreneurial thinking;
- Communicating and collaborating with teams across cultural, geographic and language boundaries;
- Making innovative use of knowledge;
- Taking charge of financial, health and civic responsibilities
- Leadership
In the U.S., our goal should be to assist every young adult, beginning at the end of middle school, to develop an individualized pathway plan that would include career objectives; a program of study; degree and/or certificate objectives; and work-linked learning experiences.

These pathway plans would hardly be set in concrete, and young adults would not be forced into tracks. But the merits of this approach are obvious. Young adults simply can’t chart a course if they don’t have a goal.
ALAMO COLLEGES’ EXAMPLES

- **Organizational:**
  - Completing redesign of CTE
  - Centralized Business Model

- **Academic Success:**
  - Reorganizing all curricula under Institutes (Clusters)
  - Beginning to develop Applied and Contextual Learning

- **Student Success:**
  - Implementing Enterprise-Wide Student Learning Outcomes
  - Partnership for 21st Century Skills
  - FranklinCovey Leadership Model
CTE EXAMPLES:
- The Alamo Academies
- Just-in-Time
- Toyota Manufacturing
Chancellor’s Call to Action
http://www.alamo.edu/district/chancellor/call-to-action/