Automotive Workforce Challenges in Recovery

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Into the Abyss

- Ongoing restructuring
- Low price premium
- High cost structure
- Product mix
- Energy prices
- Credit crisis

Total U.S. Sales of Light Vehicles:
1992 - 2009

Source: Ward's Automotive Reports

Detroit 3 U.S. and MI Hourly Employment
1978 – Feb 2009

Source: Ward's Automotive Reports
GM, Ford, Chrysler, Delphi & ACH
U.S. and Canadian Plant Shutdowns
Announced and Executed, 2005-2011

GM, Ford & Chrysler Shutdowns: 55 Plants
111,398 Hourly; plus
49,176 Salaried

NUMMI: 1 plant
4,550 Hourly;
850 Salaried;
1,000 in-plant supplier jobs

Delphi Job Cuts: 27 Plants
18,377 in Plant Shutdowns and Selloffs

ACH Job Cuts: 14 Plants
21,400 in Plant Shutdowns and Selloffs

Shutdown Total = 112,612
Line Trimming, Sold, & Buyouts = 40,900
Salaried = 46,839

Total Impact = 206,751 Jobs
2014 Detroit Three US Manufacturing Footprint

Legend

Current Plants
Company
- Chrysler
- Ford
- General Motors

Source: CAR Research
The Darkest Part of the Tunnel…
Motor Vehicle & Parts Manufacturing Employment
1999 – July 2009

Source: BLS, U.S. DOL, Sep 2009
Accumulated Employment Losses as % of Pre-Recession Employment

MONTHS INTO THE RECESSION

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

-6.0% -5.0% -4.0% -3.0% -2.0% -1.0% 0.0% 1.0%

Cuts are Not Over

“GM's hourly employment fell 21% to 49,200 workers as of Wednesday -- about 9,200 short of the turnaround plan's year-end goal.”

“GM's U.S. salaried workforce has dropped 18.2% to 24,300 as of Thursday, which is about 1,300 short of the turnaround plan's year-end goal.”
Some Hiring May Be on the Horizon Due to…

• Market recovery
• Underlying demographics
• Labor cost parity possible under 2007 and 2009 agreements with the UAW
• Technological changes
  – Need to meet new fuel economy and GHG mandates
  – Improved safety
  – Increased electronics content for safety, connectivity and entertainment

…But it may not be much, and it may not be here.
Chrysler trying to refit Fiats so they sell in US
By TOM KRISHER (AP) — Sep 26, 2009

DETROIT — Chrysler thinks its future may be in a new lineup of smaller cars based on models from Italian partner Fiat. The question is how to make them for Americans put off by stiff suspensions, firm seats and — perish the thought — not enough cupholders.

The problem is further complicated because Americans generally are plumper and taller than Western Europeans, and they’re used to driving faster and longer cars on wider roads.

It’s a dilemma faced by nearly all automakers as they try to hold down development costs by tailoring cars to sell around the globe. But at no company is the problem more acute than Chrysler, where a wholesale lineup change is needed quickly to boost sagging sales.

“…Chrysler’s 25 percent cut in salaried employees last year has left it with too few engineers and designers to get the work done on multiple models…Chrysler managers have spoken with union officials about bringing back laid-off designers, and the person said there is discussion of contracting to hire engineers and other professionals who took buyout or early retirement offers.”

Bringing Back Workers
“Walker Corp., a 56-year-old Ontario business that makes airbag, seat and audio parts for Toyota…is actually looking to add people with good math and computer skills to its work force of about 180.”

“Precision Stamping Inc. in Beaumont will bring back some laid-off employees and put a second shift back to work…”

Inland auto suppliers see bump in sales, but uncertain future

Six months ago, two of the United States’ three legacy automotive manufacturers had futures that were so cloudy, not everyone believed they could continue operating.

Now, the bankruptcies for General Motors Corp. and Chrysler LLC have come and gone, and those companies, along with Ford Motor Corp., the third of Detroit’s Big Three, are learning how to run streamlined businesses and still turn out cars and trucks.
But...for how long?
Need 3% GDP Growth To Have Positive Sales Growth,
US GDP Growth Rate and Vehicle Sales Growth Rate, 1950-2009*

Slow growth won't help

*AS of First Quarter of 2009
Wild Cards

![Gasoline Prices]

![Currency Exchange Rates]

![Car Logos]

![Volatility Index (VIX)]

**Volatility Index (VIX)**

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Reasons to Believe in a Rebound

- No comprehensive public transportation system
- Vehicle miles travelled increasing
- Vehicles per household increasing in long-term
- Household formation increasing
- Vehicle stock decreased sharply and must be replenished
- Household wealth indicators stabilizing
No Substitute
U.S. Principal Means of Transportation to Work

U.S. Highway Vehicle-Miles Traveled

Source: USDOT, RITA, BTS, August 2009
Number of Households and Vehicles Per Household

(adding 10 million households means 20 million+ more operating vehicles by 2016)

Source: U.S. Census Bureau, Current Population Reports, "Families and Living Arrangements";
U.S. Federal Highway Administration, Highway Statistics
Change in Auto Fleet – 2000 to 2009

Source: Ward’s, R.L. Polk and Co.

*2009 is forecast using the 2008 Scrap Rate and Light Vehicle sales forecasts from CSM and JD Power
House Prices are Bottoming out
House Price and Vehicle Sales

Source: S&P/Case-Shiller Home Price Indices; BEA. Quarterly Sales are seasonally adjusted at annual rate.
U.S. Motor Vehicle Sales
1951 - 2009

Units in Millions

Year

Source: AAMA Facts & Figures 1998
But Maybe Not a Very Big Rebound…
New Long-Term Forecast from CAR

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Sep 30 2009
Rebound: Coming, but not huge

Not clear where the jobs will be, or how many new workers will be required

We do know that the vehicles themselves will be different
Four Main Categories of Automotive Technology Change…

• Powertrain

• Materials and Forming

• Energy and Fuels

• Electronics, Software and Controls
What are the consequences of the retirement/SAP “brain drain”? 
Can You Teach Old Dogs New Tricks?

• Yes, you can…but…
  – It’s not always cost effective from a personal or societal standpoint
  – Need extra work years or much higher income to reap positive ROI
  – Works best when its voluntary
  – Focused technical training yields more positive results for older trainees than academic degrees
  – Spending on improved job search and matching is more efficient for workers over 35

• Best option is to retain companies/workers
• Second best option is to attract other employers needing a similarly skilled workforce
Where Will the “New Dogs” Come From?

- Industry upheaval has dampened labor market
- Despite the greening of the auto industry, careers are not seen as “sexy”
- As company market share shrinks, they will not need as many people, which leads to fewer openings
- We are studying labor demand and skill needs through the Program for Automotive Labor & Education

...Will there be enough “new dogs,” will the skills shortage drive competition for positions, and will the talent pool be large enough to support continued R&D and mfg. concentration here?
Industry Partners Tell Us…

• They’re concerned about the “pipeline” of future engineers & skilled trades workers
• Co-op and other experiential learning opportunities are KEY to preparing the future workforce
• Beyond the basics, educators should emphasize
  – Emerging technologies
  – Teamwork and communication skills
  – Business skills (budgeting, project management, etc.)
  – Working in a multi-cultural/global environment
Education and Workforce Development Partners Tell Us…

• They’re concerned about the “pipeline” of future students; students and parents need to be sold

• They want to be responsive to the auto industry, but…
  – Industry doesn’t speak with one voice
  – Local industry contacts may not be in tune with future trends
  – Difficult to get the attention of higher level industry executives
  – Education timeline is 2-4+ years ahead of hiring horizon

• Fewer and fewer co-op and other experiential learning opportunities are available

• Budget constraints make it tough to stay on top of latest technology—to succeed takes creativity, collaboration and industry partnerships
The Program for Automotive Labor and Education

• A partnership of industry, labor, education, training, workforce development, and government dedicated to meeting the automotive workforce needs of tomorrow

• Research
  – Conduct regular updates of “Beyond the Big Leave”
  – Brief members on public policies and programs
  – Provide members with broad automotive industry intelligence and data

• Networking
  – Hold quarterly meetings at company locations
  – Connect existing collaborative programs/partnerships
  – Share best practices
  – Link members to automotive economic developers

• Outreach
  – Support student outreach
  – Increase visibility for automotive workforce hiring and training issues in public discourse

http://pale.cargroup.org
Comments/Questions