“Detroit’s” commitment to innovation exceeds Congress' by 100 to 1.
Dear LFI Supporter,

Thank you very much for your support of the Level Field Institute. This memorandum outlines our activities in 2008 and our plans for 2009.

**Our Mission**

We seek to promote U.S. jobs and investment by comparing how each automaker contributes to our economy. We believe millions of Americans care about these issues—they just don’t have the facts. If consumers are informed, automakers will have more reason to invest here. But if they are not, millions of jobs will be lost.

**Our Impact**

Over the past two years, LFI has published research reports, run ads on auto job issues, and distributed our materials at auto shows, union meetings, NASCAR races and Congressional hearings. Our research has been featured in national consumer and business media, including USA Today, Wall Street Journal, New York Times, CNN, MSNBC, CNBC and NPR. And we’ve rallied retirees through ads, op-eds and local coverage in key manufacturing states, and key auto markets.

We believe our biggest contribution to date, however, is providing a highly fact-based approach to the “what you drive, drives America” debate. At dealership lots, coffee shops and backyards across America, car buyers and auto retirees already talk about these issues every day. During the 1980s, conversations like these too often led to “Japan bashing,” which was as unacceptable then as it is today. Level Field’s scorecards and fact sheets are intended to help “champions” make the case for “Detroit” as assertively and appropriately as possible.

**The Need**

What’s at stake in Detroit? Even with recent buyouts and plant closings, Ford, GM and Chrysler contribute far more to our economy than foreign automakers. If turnarounds at Ford, GM and Chrysler fail—and those companies are replaced by or ship as many jobs overseas as foreign automakers do—auto industry employment would shrink another 47%. If those companies simply used as little U.S. parts as foreign automakers do, $49 billion in U.S. parts sales (and, possibly 1 million U.S. jobs) would move overseas.

Meanwhile, “Detroit” is taking harder hits in Congress, on Wall Street and on the campaign trail. That’s why dealers, retirees, suppliers and autoworkers must work together to make our case on efficiency, innovation, health care, currency manipulation, domestic content and R&D.
Spreading the Word
For 2009, Level Field intends to expand its existing network of auto dealers, UAW locals and retirees—and to provide these champions with the tools they need to make the case for auto jobs. This binder contains a range of reports, kits and other tools our champions can use. We would greatly appreciate your advice on how to expand and improve upon these materials, so that we can reach as many champions (and car buyers) as possible.

Further Information
We look forward to working with you in 2009. If you have questions or comments, please contact us at 202-510-2018 or info@levelfieldinstitute.org.

Thank you again for your support.
Providing your customers better information will help them make better decisions about which cars to buy. Choose from the tools below then go to www.levelfieldinstitute.org or call 202-510-2018 to order your free copies.

Section 1: Champions Kit
A comprehensive discussion guide that provides the information you need to clearly communicate the facts on auto jobs.

Section 2: Campaign Kit
Frames policy issues and their impact on auto jobs.

Section 3: Scorecards
29 detailed scorecards comparing manufacturers along key criteria, including direct workforce numbers, U.S. jobs supported, number of U.S. assembly plants and domestic content percentages.

Section 4: Additional Resources
Our one-page “fact sheet” summarizes LFI findings for dealership sales personnel, retirees and other champions, while our one-page issues briefs (like this one on efficiency) help champions address specific points with the media and public officials.

Website Homepage: Online Fact Kit
Our website guides you through all the reasons why U.S. auto jobs are important to our economy and our local communities.

Jobs Per Car (JPC) Rating
Side-by-side comparisons of autos via an interactive online tool that presents one number to sum up a vehicle’s impact on jobs along with other data points.
AMERICAN AUTO JOBS MATTER:
THE FACTS YOU NEED TO DRIVE THE MESSAGE HOME.
If you’re like a lot of people who are concerned about American jobs, you’ve talked to family and friends about why it makes sense for consumers to consider where the cars they buy are built—and how each automaker contributes to our economy. With recent headlines over buyouts and plant closings, many Americans assume cars are all the same these days. They are not. Millions of jobs—and billions in R&D dollars—are at stake.

To help set the record straight, a group of concerned retirees formed the Level Field Institute—a nonprofit, research organization that is dedicated to explaining why “What you drive, drives America.” We believe the best way to promote jobs and our economic competitiveness is to make sure that car buyers who care about these issues have all the facts when they visit a dealership. That’s why we’re distributing this “Discussion Guide” to thousands of people like you; people who understand the value of supporting American jobs and are eager to get others on board.

Visit www.levelfieldinstitute.org where you’ll find a customized Jobs-Per-Car (JPC) Rating tool, “Scorecards” for each automaker, research reports, and other helpful information.
A lot of people you discuss this topic with might ask: “Does the kind of car I buy really matter to America?” The answer is that auto jobs matter in two different, but important, ways: Your community and the U.S. economy.

**YOUR COMMUNITY.**

*Nearly 300,000 Americans* work at automaker assembly lines, stamping plants, research labs and offices across America. And nearly 3 million other Americans depend on those plants and labs for their own jobs. In fact, each autoworker supports more than nine other jobs—from parts suppliers to the local schools, hospitals and police stations that serve them.

**OUR ECONOMY.**

*Automakers buy much of the steel, rubber, and semiconductors made in the U.S.; are our largest exporters and one of our largest sources of R&D; and have invested more than $230 billion in new plants and infrastructure over the past 25 years.*
With all the recent buyouts and plant closings, it’s natural for people to ask the question: “Aren’t all cars the same these days?” But the fact is, the differences between automakers can be enormous.

Here are a few comparisons that will help you explain why:

- **GM employs** nearly as many U.S. workers as all major foreign automakers combined.
- **Ford operates** nearly as many assembly lines in the U.S. as Toyota, Honda, Nissan, Hyundai and VW put together.
- **Honda employs** about six times more U.S. workers than Hyundai, and more than 15 times more workers than Volkswagen.
- **Ford, GM and Chrysler sell** less than half the cars bought in the U.S., but they buy two-thirds of the parts made here.

When my wife and I retired to Florida, we were surprised at how little our neighbors thought about what automakers contribute. With recent cuts at Ford and GM, we didn’t know what to say. But now we do—thanks to information from Level Field, I’ve found a way to support my friends back in Detroit.

– Jensen Beach, FL

**AUTOMAKERS U.S. EMPLOYMENT NUMBERS**

<table>
<thead>
<tr>
<th>Automaker</th>
<th>Employment (in thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GM</td>
<td>50</td>
</tr>
<tr>
<td>Ford</td>
<td>45</td>
</tr>
<tr>
<td>Chrysler</td>
<td>30</td>
</tr>
<tr>
<td>Toyota</td>
<td>20</td>
</tr>
<tr>
<td>Honda</td>
<td>15</td>
</tr>
<tr>
<td>Hyundai</td>
<td>10</td>
</tr>
<tr>
<td>VW</td>
<td>5</td>
</tr>
<tr>
<td>Foreign Total</td>
<td>160</td>
</tr>
</tbody>
</table>

FOR MORE FACTS AND RESOURCES, VISIT www.levelfieldinstitute.org
The JPC Rating is designed to:

- **Compare the number** of U.S. workers a company employs with the number of cars it sells in the U.S.
- **Provide a more accurate look** at jobs than simply asking where a car is assembled.

The score generated by the JPC tool is based on how many U.S. workers each company employs for every 2,500 cars it sells here. At the top end, Ford employs 87 workers for every 2,500 cars it sells, while GM and Chrysler follow with 78 and 66. Toyota scores 42, while Hyundai scores 15.

Other helpful tools from Level Field include:

- **LFI Scorecards** offer side-by-side comparisons of leading automakers on jobs, assembly plants and domestic content.
- **LFI Research Reports** examine industry trends and what it means for the U.S. economy.
- **LFI Ads and Handouts** allow retirees, auto dealers and others to share these facts with potential car buyers.

If you read the paper, you’d think there were only two kinds of plants in America: those GM is closing and those Toyota is opening. When reporters get it wrong, I send the Level Field Scorecards.

– Washington, D.C.
HOW TO ADDRESS CONCERNS OVER EFFICIENCY.

The JPC Rating gives people a quick indicator of how each car purchase impacts American jobs. But it may also raise the question: “Doesn’t a high JPC rating really mean that an automaker is less efficient?” The best way to answer this question is to explain that most automakers use about the same number of workers to build a car. It’s where the work gets done that matters.

Why Ford employs nearly twice as many Americans as Toyota.

Toyota sells more cars in the U.S. than Ford. So, you would expect them to employ more U.S. workers. But they don’t…

| U.S. CAR SALES (as % of market share) |
|-----------------|-----------------|
| Ford            | Toyota          |
| 14              | 17              |

Toyota employs about half as many U.S. workers. Why?…

| U.S. AUTO EMPLOYEES (in thousands) |
|-----------------|-----------------|
| Ford            | Toyota          |
| 65              | 37              |

Because 9 out of 10 cars Ford sells here are made here, but only 5 out of 10 cars Toyota sells are made here.

| U.S. PRODUCTION (as % of U.S. sales) |
|-----------------|-----------------|
| Ford            | Toyota          |
| 85              | 46              |

GM is more efficient than VW, yet still employs 60 times more Americans.

Each GM worker makes 31 cars per year, while each VW worker only makes 17 cars per year…

| CARS PRODUCED PER WORKER |
|-----------------|-----------------|
| GM              | VW              |
| 31              | 17              |

But 37% of the total GM workforce is here, while less than 1% of the total VW workforce is in the U.S.

<table>
<thead>
<tr>
<th>GM Global Workforce</th>
<th>37%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreign</td>
<td>U.S.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>VW Global Workforce</th>
</tr>
</thead>
<tbody>
<tr>
<td>1%</td>
</tr>
</tbody>
</table>

For more facts and resources, visit www.leveledinstitute.org
Last year, automakers spent approximately $148 billion on U.S. parts, making them among the largest buyers of U.S. steel, rubber and semiconductors. Those parts suppliers, in turn, employed about 569,000 U.S. workers. The average Big 3 car used more than twice as much domestic content as the average foreign car, including those built in the U.S.

What's the difference between 72% and 34% domestic content?

If GM, Ford and Chrysler had used only 34% domestic content last year (like foreign automakers did), they would have spent $49 billion less here in the U.S. That $49 billion in lost sales could have cost 189,000 American auto parts workers their jobs. Because each auto parts worker supports 4.7 others, those lost sales would cost 1 million U.S. jobs.
Today’s patents will have a big impact on whether tomorrow’s best jobs remain here in the U.S. Fortunately, automakers invest more in R&D than nearly any other industry. And Ford, GM and Chrysler invest approximately 80% of their spending here in the U.S.

**Reasons to feel good about the future.**

While the U.S. has lost many basic manufacturing jobs, advanced manufacturing jobs (on transmissions and engines) are likely to remain. Today’s patents will also have a big impact on whether tomorrow’s best jobs remain here in the U.S.

**R&D translates into better cars for Americans.**

In addition to having a positive impact on job growth, R&D also offers tangible benefits for car buyers. It helps foster advances in technology, which translates into safer, less expensive and more fuel-efficient automobiles. It also helps bolster America’s reputation as a leader in innovation.

**In Michigan alone, more than 200 R&D facilities employ 65,000 R&D workers—a $10 billion per year investment in America’s economic competitiveness.**
HOW TO PLAY A PART IN SUPPORTING AMERICAN JOBS.

BE PROACTIVE.
• Encourage people you know to use the JPC Rating (on the Level Field website) before they buy a car.
• Download Level Field Scorecards and use other research information from the Level Field website to make the case for American auto jobs.
• Make sure your local autodealer has Level Field’s latest information.
• Write to reporters who dismiss the importance of American auto jobs.
• Write to Congress about issues that affect American auto jobs.

STAY INFORMED.
• Visit www.levelfieldinstitute.org on a regular basis for updates and materials on the American auto industry and workforce.
• Email us at info@levelfieldinstitute.org to share your feedback or ask questions.

“Cars are a big topic around here—somewhere between sports and arguing about politics. It’s great to be able to show someone a Level Field Scorecard that proves you’re right.”
— Birmingham, MI

FOR MORE FACTS AND RESOURCES, VISIT www.levelfieldinstitute.org
Auto jobs matter to America.
Nearly three million U.S. jobs depend on automakers. They are America’s #1 exporter, a leading buyer of parts and materials, and a critical source of R&D.

Some automakers contribute more than others.
GM employs nearly as many Americans as all foreign automakers combined. Ford operates nearly as many assembly lines as Toyota, Honda, Nissan and Hyundai combined.

The JPC Rating makes it easy to compare cars.
This fast, reliable online tool calculates a jobs-per-car rating, based on how many U.S. workers each company employs for every 2,500 cars it sells here.

Auto parts play a big part in the job story.
Automakers who use more domestic content help secure the jobs of 569,000 auto parts workers. Ford, GM and Chrysler use twice as much American auto parts per car.

R&D is the future of the American auto industry.
This $17 billion industry translates into more jobs, more infrastructure investment, not to mention better, safer cars for all of us. By showing our support for American autoworkers, we give automakers more reason to keep investing in this area.

“I don’t care about what my friends buy, as long as they at least take a look at the facts. If we don’t show automakers we care about jobs, they won’t care about them as much themselves.”
– Cleveland, OH

WHAT YOU DRIVE, DRIVES AMERICA.

FOR MORE FACTS AND RESOURCES, VISIT www.lewelfieldinstitute.org
U.S. automotive sales and production figures are for the 2008 calendar year. Auto job estimates are as of December 31, 2008, based on the automakers’ respective annual reports, corporate websites and press statements. Worker productivity estimates are based on 2007 employment data, because most automakers have not yet reported global employment for December 31, 2008. “Spinoff” employment refers to jobs at suppliers and other companies that directly serve automakers, as well as jobs at neighboring businesses (like hospitals, schools and restaurants) that would not exist without the financial support of autoworkers and their families. LFI “spinoff” estimates are based on studies by the Center for Automotive Research (CAR). Auto supplier employment estimates are based on 2004 data (Contribution of the Motor Vehicle Supplier Sector to the Economies of the United States and its 50 State), adjusted to reflect the drop in U.S. auto production from 2004 through 2008. LFI’s “jobs per car” scores are obtained by dividing an automaker’s U.S. jobs (as of December 31, 2008) by the number of cars that automaker sold in the U.S. that year. This approach accounts for the research, design, engineering and management jobs that tend to be overlooked by simply counting assembly plants. It also accounts for market share. Our JPC site presents jobs per car data in terms of jobs per every 2,500 cars sold. Doing so allows us to present results in whole numbers, which are easier to compare. For example, Hyundai/Kia supports 15 jobs for every 2,500 cars sold. If we were to present this in terms of every single car sold, Hyundai’s JPC score would be .0006. Assembly plant comparisons are based on Ward’s Automotive Group’s “North America 2009 Model Vehicle Final Assembly Plant Locations.” Because most plants in the U.S. will be idled for at least part of 2009, we exclude only those plants that have been permanently closed. Automaker R&D spending estimates are based on the companies’ respective annual reports and corporate websites, as well as materials provided by the National Science Foundation, ATPC, JAMA, AIAM and recent R&D reports by Booz Allen. Statistics relating to automotive R&D employment and facilities in Michigan are from the Michigan Economic Development Corporation. Domestic content figures are based on the automakers’ filings with the Department of Transportation for each of their 2008 models, weighted according to each model’s 2008 sales. Capital investment data is taken from the Automotive Trade Policy Council’s The Economic Contribution of the U.S. Auto Industry (2007), the Center for Automotive Research’s “Book of Deals,” and automaker and auto trade association websites.
MILLIONS OF U.S. JOBS AND TENS OF BILLIONS OF DOLLARS IN AUTOMOTIVE INVESTMENT ARE AT STAKE IN THE NEXT ELECTION.

From health care to CAFE, your candidate is likely to face questions from a range of audiences with a strong interest in America’s auto industry, including organized labor, communities hit hard by plant closings, and farmers producing ethanol crops.

Level Field is providing this policy guide to each campaign organization in advance of the 2010 state and Congressional elections. We hope you’ll find it useful in preparing your points on economic competitiveness, the need for meaningful health care reform, and other leading issues.

We’d also like to encourage each candidate to move beyond some of the more harmful rhetoric that’s being used about the auto industry, and “Detroit,” in particular.

Today, “Detroit” remains America’s largest exporter, one of our largest sources of corporate R&D, and one of our largest buyers of U.S. steel, iron, glass and computer chips.

“Detroit” also stretches from Alabama to Wyoming. When you include the automakers themselves, parts suppliers, 20,000 dealerships and hundreds of research facilities nationwide, the auto industry supports nearly 3 million U.S. jobs.

Why should this matter to candidates for public office? Because the very circumstances that make companies like Ford, GM and Chrysler so valuable to America (U.S. plants, jobs and retirees) have also put them at a competitive disadvantage. Even with a dramatic improvement in quality, painful plant closings and buyouts, and a commitment to meeting higher CAFE standards, Detroit’s turnaround will not succeed unless policymakers tackle health care, kick the tires on new trade agreements, and call upon our Asian trading partners to stop boosting their exports by manipulating their currencies.

If you would like further information about the issues outlined in this briefing, please contact us at info@levelfieldinstitute.org or visit us at www.levelfieldinstitute.org.
KEY ISSUES

■ AUTO JOBS
Automakers support 3 million U.S. jobs, but the bulk of those jobs are supported by just three companies: Ford, GM and Chrysler.

■ AUTO PARTS
Last year, automakers spent approximately $149 billion on U.S. parts, making them among the largest buyers of U.S. steel, rubber and semiconductors. Those parts suppliers, in turn, employed about 569,000 U.S. workers. The average Big 3 car used more than twice as much domestic content than the average foreign car, including those built in the U.S.

■ INVESTMENT
Those that believe “all cars are the same,” should consider what America’s economy could look like if Ford, GM and Chrysler operated at the same U.S. job and investment rates as the average foreign automaker.

■ R&D
Those criticizing “Detroit” for failing to innovate should check with the National Science Foundation, which tracks U.S. R&D spending… and also happens to spend about $3 billion less on R&D each year than Ford.

■ HEALTH CARE
Every U.S. employer is put at a disadvantage because our health care costs too much. But automakers and other U.S. companies that face strong global competition are hurt more. With the security of millions of retirees and retiree spouses at stake, automakers are a leading example of why health care reforms are both a moral imperative and a business imperative.

■ CAFE
Level Field supports raising CAFE. But the fine print on current proposals has a big impact on U.S. jobs.

■ CURRENCY POLICY
Smart legislation and a strong White House response to Japan’s manipulation of the yen could save the U.S. auto industry millions of jobs and billions in R&D. Japan’s currency manipulation represents a $3,000 per car subsidy. Removing that subsidy could have a larger impact on domestic automaker profitability than solving health care.

■ TRADE AGREEMENTS
Level Field’s retiree supporters favor free trade, but one agreement under consideration presents significant risks that need to be addressed. Strong action by Congress could help open the door to the Korean auto market.
WHY AUTO JOBS MATTER...
AND WHY SOME COMPANIES MATTER
A LOT MORE THAN OTHERS.

Automakers contribute far more to the U.S. economy than most Americans appreciate. Accounting for nearly 3 million U.S. jobs, they’re our largest exporter, one of our largest sources of corporate R&D, and one of our largest buyers of U.S.-made parts and material. Yet much of this value comes from just three of the 20-odd companies competing here.

**Jobs**
GM alone employs nearly as many Americans as all foreign automakers combined. Ford employs as many Americans at just one of its plants as Hyundai, Mercedes, Subaru and VW each employ nationwide.

**Plants**
Automakers operate 54 assembly plants nationwide, but Ford, GM and Chrysler built 37 of them. In fact, Ford operates as many assembly plants here as Toyota, Nissan, Hyundai, Subaru, Mercedes and VW combined, while GM has more.

*All Foreign Automakers Combined*
WHY AUTO JOBS MATTER... (cont.)

R&D
Thanks largely to Ford, GM and Chrysler, more than 65,000 Americans work in auto R&D in Michigan alone. By comparison, the 14 Japanese automakers doing business in the U.S. employ only about 4,000 R&D workers nationwide.

Infrastructure Investment
Automakers invested $239 billion in plants and infrastructure from 1980 to 2005, but 86 cents of every dollar came from Chrysler, Ford and GM.

For every dollar invested, foreign automakers contributed only 14 cents.

U.S. Parts
Automakers spent $149 billion on U.S. parts last year, but Detroit represented more than two-thirds of that amount...

If U.S. automakers used as little of domestic content as foreign automakers, $49 billion would move overseas.

Retirees
Because GM, Ford and Chrysler have been here far longer than foreign automakers, they support 600 times more retirees and retiree family members than foreign automakers, including Toyota and Honda.
Buying a Ford, GM or Chrysler supports about five times more U.S. jobs, on average, than buying a Hyundai—and twice as many U.S. jobs, on average, than buying a Toyota. Does that mean the Big 3 are five times less efficient than Hyundai?
No. It’s where the work gets done that matters most to U.S. jobs.

Global Workforce
Ford vs. VW
Ford uses fewer workers to build a car than VW, yet Ford employs 43 times more Americans. Why? Because three of every ten Ford workers is based in the U.S., while fewer than 1 in 100 VW workers is based here.

GM vs. Toyota
GM and Toyota each use approximately the same number of workers to build each car. So why does GM employ 2.5 times more Americans than Toyota? Because only 12% of Toyota’s workforce is here. At GM, it’s 37%.

U.S. Production
Ford vs. Toyota
Toyota sold 20% more vehicles in the U.S. last year, so why does Ford employ nearly twice as many Americans? Because Ford makes a lot more cars in the U.S. than Toyota. In fact, 85 out of every 100 cars Ford sold in the U.S. last year were made in the U.S. Only 46 of every 100 cars Toyota sold here last year were made here.

Ford produced 565,000 more vehicles in the U.S. last year than Toyota, even though Toyota sold about 350,000 more vehicles here.

U.S. Production as % of vehicles sold in the U.S.

- Ford: 85% of 1.87M vehicles sold
- Toyota: 46% of 2.22M vehicles sold
On average, 72% of the parts in each Ford, GM and Chrysler are “domestic.” That’s more than twice the average foreign automaker’s domestic content (34%). What’s the difference between 72% and 34% domestic content? About $49 billion in U.S. parts sales—and nearly 1 million U.S. jobs.

“Domestic content” is a term used by the U.S. government to measure how many U.S. or Canadian parts have gone into producing a particular car. The percentage is determined based on the value of the parts used. For example, if a truck’s engine and transmission are built in the U.S. and everything else comes from Mexico, and the engine and transmission represent half the cost of the truck’s parts, the truck’s “domestic content” is 50%. Automakers post this percentage on each car, so that car buyers can see how their purchase affects U.S. jobs.
Why does this matter?

Last year, automakers spent about $149 billion on U.S. parts, buying nearly a third of America’s iron, aluminum and steel, and nearly 60 percent of the rubber used to make tires. In fact, auto parts suppliers employ about twice as many Americans as the automakers themselves. These parts suppliers are the #1 industrial employer in seven states, and a top five employer in 11 others.

Ford, GM and Chrysler build a lot more cars here than foreign automakers do. Consequently, they buy more of their parts here. In fact, while they sold less than half the cars purchased in the U.S. last year, they bought more than two-thirds of the parts made here.

Perhaps the best way to understand the importance of these parts sales is to consider what America would look like if Ford, GM and Chrysler used as few U.S. parts as foreign automakers do. In other words, if Ford, GM and Chrysler had shifted from 72% domestic content to 34% domestic content, what would have happened?

The U.S. parts market would have shrunk by another third overnight. Approximately $49 billion in U.S. parts sales would have moved overseas – and 189,000 auto parts jobs could have moved with them. Because each parts supplier in your community supports nearly five other jobs, shifting from 72% domestic content to 34% domestic content could have cost America 1 million jobs.

Because of Detroit’s two-to-one parts advantage, a Ford assembled in Mexico has more “domestic content” than a Hyundai built in Alabama or a BMW built in South Carolina.

Domestic Parts Spending

Automakers spent $149 billion on U.S. parts last year, but “Detroit” accounted for two-thirds of this amount… If U.S. automakers used as little domestic content as foreign automakers, $49 billion would move overseas.

- Foreign
- Big 3
- At Risk

Because of Detroit’s two-to-one parts advantage, a Ford assembled in Mexico has more “domestic content” than a Hyundai built in Alabama or a BMW built in South Carolina.
Ford operates about as many assembly plants as Toyota, Subaru, BMW, Hyundai, Nissan and VW put together. And Ford, GM and Chrysler, together, operate twice as many assembly plants as all foreign automakers combined.

If you follow the auto industry coverage in your local newspaper, you might think there are only two kinds of auto plants in America: those being shut down by GM and those being opened by foreign automakers.

When Honda announced in 2006 it was investing $1 billion in a new Indiana plant, more than 500 articles featured the news. About the same time, Ford announced $1 billion in improvements to several plants in Michigan. Only 25 articles featured the news.

The fact is, however, that Ford, GM and Chrysler operate twice as many assembly plants in the U.S. as all the foreign automakers combined.

Because their presence is so much larger than foreign automakers, Ford, GM and Chrysler have invested six times more than all foreign automakers combined (1980-2005).

Eighty-six cents of every dollar automakers invested in America came from Ford, GM or Chrysler; the remaining 14 cents came from all the foreign automakers combined.

For every dollar invested, foreign automakers contributed only 14 cents.

In just five years (2001-2005), Ford, GM and Chrysler invested more in U.S. plants and infrastructure than all the foreign automakers combined invested over the past 25 years ($38.6 billion vs. $33 billion).
Candidates who criticize “Detroit” for failing to innovate should read the latest report from the National Science Foundation, which tracks R&D spending. NSF’s report finds, once again, that Detroit’s automakers are among America’s largest sources of corporate R&D. Thanks, in part, to this R&D, our roads are four times safer than they were in 1960, auto emissions are 99% cleaner than they were in 1970, and fuel efficiency has increased by more than half since 1975 (even though we buy 2.5 times more trucks and SUVs).

Today the bulk of R&D in America is done by corporations (65%), not the Federal government (28%). Since the 1970s, when corporate R&D first took over government spending on R&D, the gap has widened considerably.

Ford, GM and Chrysler spent $17.5 billion on R&D last year, and 80 cents of every dollar ($14 billion) was spent in the U.S.

In Michigan alone, more than 65,000 R&D workers operate out of more than 200 facilities—representing a $10 billion/year investment in America’s economic competitiveness. That’s why Michigan ranks second in corporate R&D spending. California is #1, over all. But, on a per capita basis, Michigan ranks higher.

To get a true sense of how important this R&D is to our economy, it helps to compare Detroit’s spending on R&D to the research outlined in Congress’s current “Apollo” legislation. Apollo would invest $100 million per year on fuel efficiency. That is about one-half of one percent of what Detroit will be spending over that same period.
Of course, spending more on R&D does not necessarily translate into innovation, but Detroit's record on matters that matter most to consumers and the free market suggests the money's been well spent.

**Safety**
Despite the fact our highways are far more crowded, they are 4 times safer than 1960.

**Efficiency**
Over 10 years, Detroit reduced the number of hours it takes to build a car by more than 20% (cutting 8 hours out of the 42 hours it took in 1995).

**Quality**
JD Power’s results on initial quality show Detroit substantially eliminating the quality gap in 2005, with Ford winning more categories than Toyota in 2007—and GM winning Motor Trend Car and Truck of the Year honors for 2008. Ford won Truck of the Year in 2009.

**Fuel Economy**
GM’s fuel economy improved by half from 1975 to 2005, even though trucks rose from about 20% of fleet sales to more than 50%. Results at Ford are similar.

**Our Environment**
Auto emissions are 99% cleaner than the 1970s.
Today, Ford, GM and Chrysler spend more on health care than steel. But before you condemn them for their “legacy costs,” consider the people behind that legacy.

Every U.S. employer is hurt by health care costs, because (1) we pay twice as much for health care as other industrialized nations; and, (2) we rely on employers to carry our health care system.

But the health care challenge is particularly tough for companies that face strong international competition. And it’s even worse in industries, like the auto industry, where most of the health care costs are borne by just a few firms, because they are the ones with nearly all of America’s auto retirees.

Though domestic automakers and foreign automakers each sell about half the cars bought in the U.S. each year, Ford, GM and Chrysler cover health care for six times more Americans than foreign automakers (2 million vs. 300,000).

Ford, GM and Chrysler together support more than 600 times more U.S. retirees and family members as foreign automakers do. In fact, supporting its retirees costs GM about $950 for each car they sell here. Ford spends about $635 per car sold. At Toyota, it’s $0 per car.

If an electric utility needs to raise rates to cover rising health care costs, its customers don’t have much of a choice. But if Ford needs to raise prices in order to cover its rising health care costs, car buyers can always choose an import. That’s one reason why investors recently bid $65 billion for a single Texas utility (TXU)—about 1.5 times the combined market capitalization of Ford, GM and Chrysler at that time.
Everyone agrees that fuel economy standards for autos must rise, but Congress and the Executive Branch must take a closer look at how these new rules will be applied. Hundreds of thousands of U.S. jobs are at stake.

Established in 1975 in response to the 1973-4 OPEC oil embargo, CAFE is the sales-weighted average fuel economy, expressed in miles per gallon (mpg), of a particular automaker’s car and truck fleets. The Department of Transportation’s National Highway Transportation and Safety Administration (NHTSA) administers CAFE standards—including determining whether increases are economically and technically feasible.

Automakers meet CAFE by controlling the mpg of each car in their fleets, but they must also respond to changes in consumer demand (for example, if an automaker’s lower mpg vehicles sell more than expected, that raises the automakers average mpg).

Congress should maintain CAFE “anti-backsliding” provisions that support U.S. production of the very cars CAFE is supposed to encourage. Those provisions require automakers to meet CAFE standards for the fleets they build here and the fleets they build overseas, encouraging small car production in the U.S.

How can we have a flex-fuel economy, if we don’t have cars that can run on flex fuels? Gas companies must do their share. Today, only 1,900 ethanol/E85 pumps are available nationwide, despite the fact that consumers have purchased 10.5 million cars capable of using it.
By calling upon Japan to stop manipulating its currency, Congress and the President could end years of import subsidies that have made it harder to produce cars in the U.S. This would encourage foreign automakers to build more of their cars here. In fact, ending Japan’s yen subsidy could have as big an impact on Detroit’s profitability as reducing health care costs—and it could take far less time to accomplish.

For years, Japan intervened in currency markets to keep the yen weak (versus the dollar), which made it cheaper for Japanese manufacturers to export to the U.S. In fact, from 1998 to 2004, Japan intervened approximately 160 times, spending $505 billion. Japanese officials continue to send strong messages to the markets to keep the markets artificially weak.

Estimates of the impact of this subsidy generally range from $3,000 to $14,000 per import, depending on the car’s cost and the economist’s assumption of just how devalued the yen is at a given time. And because so much of their research, design, engineering and marketing are conducted in Japan, this subsidy also gives Toyota, Nissan and Honda an advantage on the cars they make here in the U.S.

If you doubt that Japan is, in fact, intervening in currency markets, you need only listen to Japan’s Finance Minister and the former Chairman of Toyota Motor Company, each of whom made it clear that intervening (through currency selling or by “talking down” the Yen) was taking place.*

How big a boost does Japan’s currency policy give Toyota, Honda and Nissan? Imagine if Uncle Sam helped GM by paying for the sunroof, alloy wheels, remote start and premium stereo on your new Saturn Aura. That’s about $3,000 worth of help, which gives you a sense of just how helpful Japan’s $14,000 subsidy for each Toyota Land Cruiser could be.

---

*“Hiroshi Okuda, chairman of Toyota Motor Corp., yesterday said that ‘measures may have to be taken’ to stem the yen’s gains. ‘If the present exchange rate remains… there may need to be measures taken,’ Okuda said.” Bloomberg, May 9, 2006. “Excessive and disorderly moves in foreign exchange rates are undesirable because they may hurt economic growth.” Sadakazu Tanigaki, Finance Minister, Bloomberg, May 9, 2004.

**ATPC, America’s Auto Industry: Economic Contributions & Competitive Challenges
These days, every automaker is a global company—and open, fair trade benefits us all. But recent trade data shows that some partners are blocking U.S. vehicles through non-tariff barriers.

**Japan**

Proving that a country is protecting its market with non-tariff barriers (like onerous inspection practices and restrictions on dealerships) can be difficult. But American, European and Korean automakers—together—still capture less than 5% of Japan’s auto sales. Toyota makes great cars, but does that really explain why it has captured 3 times more market share in the U.S. than every U.S., European and Korean automaker put together have captured in Japan?

**South Korea**

Toyota, Honda and Nissan together capture about one in three U.S. auto sales—but they’ve captured less than one-twentieth that amount in Korea. How can a single company, Hyundai, capture a bigger share of the U.S. market than all the U.S., European and Japanese automakers combined enjoy in Korea?

**Why can’t all the European, Korean and American automakers together sell 1/3 as many cars in Japan as Toyota sells in the U.S.?**

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>17%</td>
<td>5%</td>
</tr>
</tbody>
</table>

**How do you explain a 230x difference in market share for GM?**

<table>
<thead>
<tr>
<th>GM share of U.S. Market</th>
<th>GM share of Japanese Market</th>
</tr>
</thead>
<tbody>
<tr>
<td>23%</td>
<td>0.1%</td>
</tr>
</tbody>
</table>

**How can Hyundai’s share of the U.S. market be bigger than the Korean market share of every other company in the world?**

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>5%</td>
<td>3%</td>
</tr>
</tbody>
</table>
**Sources and Methodology**

U.S. automotive sales and production figures are for the 2008 calendar year. Auto job estimates are as of December 31, 2008, based on the automakers’ respective annual reports, corporate websites and press statements. Worker productivity estimates are based on 2007 employment data, because most automakers have not yet reported global employment for December 31, 2008. “Spinoff” employment refers to jobs at suppliers and other companies that directly serve automakers, as well as jobs at neighboring businesses (like hospitals, schools and restaurants) that would not exist without the financial support of autoworkers and their families. LFI “spinoff” estimates are based on studies by the Center for Automotive Research (CAR).

Auto supplier employment estimates are based on 2004 data (Contribution of the Motor Vehicle Supplier Sector to the Economies of the United States and its 50 State), adjusted to reflect the drop in U.S. auto production from 2004 through 2008. LFI’s “jobs per car” scores are obtained by dividing an automaker’s U.S. jobs (as of December 31, 2008) by the number of cars that automaker sold in the U.S. that year. This approach accounts for the research, design, engineering and management jobs that tend to be overlooked by simply counting assembly plants. It also accounts for market share. Our JPC site presents jobs per car data in terms of jobs per every 2,500 cars sold. Doing so allows us to present results in whole numbers, which are easier to compare. For example, Hyundai/Kia supports 15 jobs for every 2,500 cars sold. If we were to present this in terms of every single car sold, Hyundai’s JPC score would be .0006.

Assembly plant comparisons are based on Ward’s Automotive Group’s “North America 2009 Model Vehicle Final Assembly Plant Locations.” Because most plants in the U.S. will be idled for at least part of 2009, we exclude only those plants that have been permanently closed. Automaker R&D spending estimates are based on the companies’ respective annual reports and corporate websites, as well as materials provided by the National Science Foundation, ATPC, JAMA, AIAM and recent R&D reports by Booz Allen. Statistics relating to automotive R&D employment and facilities in Michigan are from the Michigan Economic Development Corporation. Domestic content figures are based on the automakers’ filings with the Department of Transportation for each of their 2008 models, weighted according to each model’s 2008 sales.

Capital investment data is taken from the Automotive Trade Policy Council’s The Economic Contribution of the U.S. Auto Industry (2007), the Center for Automotive Research’s “Book of Deals,” and automaker and auto trade association websites. Retiree, health care and pension data are taken from reports by the ATPC, Auto Alliance, JAMA, AIAM and CAR. Fuel efficiency, traffic safety and emissions data are from the U.S. Department of Transportation.

**About Level Field Institute**

Level Field seeks to promote U.S. jobs, R&D and infrastructure investment by offering clear comparisons of how various automakers contribute to the U.S. economy. Established by retirees and families of GM, Ford, Chrysler, and the suppliers and dealers that support them, the Level Field Institute also has the support of major manufacturers, suppliers, dealers, unions and others who care about these issues. Level Field welcomes foreign automaker investments and supports free trade.

**Additional Resources**

For further information about these issues, we encourage you to visit the following websites:

**Level Field Institute** provides research reports on auto industry trends, as well as company scorecards on jobs, plants and domestic content. [www.levelfieldinstitute.org](http://www.levelfieldinstitute.org)

**Automotive Trade Policy Council** provides reports on currency policy, as well as detailed reports on domestic automakers’ contribution to the U.S. economy. [www.autotradecouncil.org](http://www.autotradecouncil.org)

**Automotive Alliance** provides reports on the economic contribution of America’s auto industry. [www.autoalliance.org](http://www.autoalliance.org)

**Japan Automobile Manufacturers Association** represents the fourteen major Japanese car, truck, bus and motorcycle manufacturers. [www.jama.org](http://www.jama.org)

**Association of International Automobile Manufacturers** provides reports on the economic contribution of foreign automakers. [www.aiam.org](http://www.aiam.org)

**Center for Automotive Research** conducts automotive industry research, publishing studies investigating governmental influences on the industry, and how industry affects society. [www.cargroup.org](http://www.cargroup.org)
SCORECARDS

THESE REPRESENT A SAMPLE OF THE TOTAL NUMBER OF SCORECARDS.

3
Level Field was founded by retirees of Ford, GM, Chrysler, and the companies that supply them. We encourage all foreign-owned automakers to invest more in America—home to some of the best workers in the world. But if you are considering a company’s contribution to our economy when you buy a car, you should have all the facts.

To learn more, please visit our website at: www.levelfieldinstitute.org

What you drive, drives America.
Level Field was founded by retirees of Ford, GM, Chrysler, and the companies that supply them. We encourage all foreign-owned automakers to invest more in America—home to some of the best workers in the world. But if you are considering a company’s contribution to our economy when you buy a car, you should have all the facts.

To learn more, please visit our website at: www.levelfieldinstitute.org

What you drive, drives America.
Level Field was founded by retirees of Ford, GM, Chrysler, and the companies that supply them. We encourage all foreign-owned automakers to invest more in America—home to some of the best workers in the world. But if you are considering a company’s contribution to our economy when you buy a car, you should have all the facts. To learn more, please visit our website at:

www.levelfieldinstitute.org

What you drive, drives America.
Level Field was founded by retirees of Ford, GM, Chrysler, and the companies that supply them. We encourage all foreign-owned automakers to invest more in America—home to some of the best workers in the world. But if you are considering a company’s contribution to our economy when you buy a car, you should have all the facts. To learn more, please visit our website at: www.levelfieldinstitute.org

GM vs. Hyundai

Each one of these jobs at auto plants, labs and offices supports more than 9 other jobs in the surrounding community.

A good way to judge a company’s commitment to U.S. investment is to measure how many of the cars that it sells here are also assembled here.

A typical plant employs about 2,000 workers, requires $1 billion or more in capital investment, and encourages suppliers to build their factories nearby.

Auto parts suppliers are the largest industry employer in 7 States, and a top five employer in 11 others.

*Hyundai and Kia combined.
Level Field was founded by retirees of Ford, GM, Chrysler, and the companies that supply them. We encourage all foreign-owned automakers to invest more in America—home to some of the best workers in the world. But if you are considering a company’s contribution to our economy when you buy a car, you should have all the facts.

To learn more, please visit our website at: www.levelfieldinstitute.org

What you drive, drives America.
Level Field was founded by retirees of Ford, GM, Chrysler, and the companies that supply them. We encourage all foreign-owned automakers to invest more in America—home to some of the best workers in the world. But if you are considering a company’s contribution to our economy when you buy a car, you should have all the facts. To learn more, please visit our website at: www.levelfieldinstitute.org

What you drive, drives America.
Level Field was founded by retirees of Ford, GM, Chrysler, and the companies that supply them. We encourage all foreign-owned automakers to invest more in America—home to some of the best workers in the world. But if you are considering a company’s contribution to our economy when you buy a car, you should have all the facts. To learn more, please visit our website at: www.levefieldinstitute.org

Honda vs. Hyundai*

Each one of these jobs at auto plants, labs and offices supports more than 9 other jobs in the surrounding community.

A good way to judge a company’s commitment to U.S. investment is to measure how many of the cars that it sells here are also assembled here.

A typical plant employs about 2,000 workers, requires $1 billion or more in capital investment, and encourages suppliers to build their factories nearby.

Auto parts suppliers are the largest industry employer in 7 States, and a top five employer in 11 others.

*Hyundai and Kia combined.
Honda vs. Toyota

**DIRECT EMPLOYMENT - 2008**

- **Honda**: 25,000
- **Toyota**: 37,000

Each one of these jobs at auto plants, labs and offices supports more than 9 other jobs in the surrounding community.

**U.S. PRODUCTION - 2008**

- **Honda**: 69%
- **Toyota**: 46%

A good way to judge a company’s commitment to U.S. investment is to measure how many of the cars that it sells here are also assembled here.

**U.S. ASSEMBLY PLANTS - 2008**

- **Honda**: 5
- **Toyota**: 4

A typical plant employs about 2,000 workers, requires $1 billion or more in capital investment, and encourages suppliers to build their factories nearby.

**MODEL YEAR DOMESTIC CONTENT - 2008**

- **Honda**: 47%
- **Toyota**: 41%

Auto parts suppliers are the largest industry employer in 7 States, and a top five employer in 11 others.

The JPC (Jobs Per Car) score is based on how many U.S. workers each company employs for every 2,500 cars it sells here.

**Level Field** was founded by retirees of Ford, GM, Chrysler, and the companies that supply them. We encourage all foreign-owned automakers to invest more in America—home to some of the best workers in the world. But if you are considering a company’s contribution to our economy when you buy a car, you should have all the facts. To learn more, please visit our website at:

www.levelfieldinstitute.org

What you drive, drives America.
1. Automakers generally use the same number of employees to build a car...

2. And foreign automakers and domestic automakers generally sell about the same number of cars in the U.S....

3. But GM, Ford and Chrysler have a lot more of their workers here in the U.S....

4. And GM, Ford and Chrysler make a lot more of their cars in the U.S....

5. Which explains why they buy more U.S. parts...

6. And invest more in plants and infrastructure...

7. And employ so many more Americans.

*Sales, production, jobs and plants as of 12/31/08. Productivity based on 2007 employment (latest complete info available).
Level Field was founded by retirees of Ford, GM, Chrysler, and the companies that supply them. We encourage all foreign-owned automakers to invest more in America – home to some of the best workers in the world. But if you are considering a company's contribution to our economy when you buy a car, you should have all the facts.

**Key Point:**
GM employs nearly as many Americans as all foreign automakers combined. Ford employs more Americans at one plant than Hyundai, VW and Mercedes each employ nationwide.

**Key Point:**
GM operates more plants than all foreign automakers combined. Ford operates more plants than Toyota, Hyundai, Subaru, Nissan, BMW and VW combined.

**Key Point:**
If Detroit used as little “domestic content” as foreign automakers, about $49 billion in U.S. parts sales—and 1 million jobs—could have moved overseas last year.

What you drive, drives America. To learn more, please visit our website at: www.levelfieldinstitute.org
At Level Field, we believe the most accurate way to judge an automaker’s contribution to the U.S. economy is to examine the number of jobs that company supports on a car-by-car basis. This number should take into consideration:

- **Jobs that take place beyond the assembly line**, including engineering, design, finance, and more.
- **Market share**—because a smaller automaker’s jobs are measured against the cars it sells, rather than the jobs a larger automaker might support. To make it easier to calculate the number of jobs supported by a particular model of car, the Level Field Institute has developed the JPC Rating.

An easy, effective way to compare.

With this new tool, you’ll be able to input specific make and model information and automatically receive a JPC score. In a nutshell, the JPC Score helps you see how many U.S. workers a particular company employs for every 2,500 cars it sells here. You can then compare that company’s score with its competitors.

For example, Ford employs 87 Americans for every 2,500 cars sold, followed by GM and Chrysler at 78 and 66, respectively. Honda ranks first among the major foreign automakers, with a score of 44, followed by Toyota, Nissan and Hyundai/Kia at 42, 34 and 15, respectively.

Why do we count jobs per 2,500 cars sold, rather than for each car sold? Doing so produces whole numbers, which are easier to compare. For example, each GM car supports .031 jobs, while each 2,500 cars supports 78.

You can find this feature at [www.jobspercar.com](http://www.jobspercar.com)
If you have any comments or questions, please feel free to call or write.

Email:  info@levelfieldinstitute.org
Phone:  202-510-2018
Address:  Level Field Institute
          5505 Connecticut Avenue, NW #346
          Washington, D.C. 20015-2601

To stay posted on the organization’s latest reports and advertising campaigns, please visit:
www.levelfieldinstitute.org