Preparing for Lean Times

Though we're in boom times now, some seasoned pros are preparing for a downturn

BY TED CUSHMAN

Contractors today are living through some of the best business times in history. Younger builders may not remember the last recession (1990-91), much less the one before that (1982-84). But experienced pros say the business cycle has always been part of their working lives.

"As far back as the 1950s, every recession I remember has been presaged by a boom," says Seattle, Wash., remodeler Howard Portnow, whose father and grandfather were builders. "The worst of times are often preceded by the best of times."

"If the economy doesn't turn down," agrees Oakland, Calif., remodeler Michael Luttrell, "it'll be the first time in history it hasn't. The higher it goes, the harder it falls."

Forecasting the future. Predicting just when the inevitable slowdown will arrive is a shot in the dark. National trends aside, however, most builders have the information they need to forecast at least their own business future — if they're willing to make the effort.

Portnow says numbers from a builder's own business provide excellent clues to trends in the local economy. One good indicator is a slowdown in the payment cycles: "When your clientele is not feeling as wealthy, they don't reach in their pockets as fast." Another is the availability of carpenters and subs: As the building market cools, subcontractor lead times get shorter and more workers come onto the job market.

Chicago-area accountant and business consultant Stuart Lerman ticks off a list of business indexes, including number of leads, closure ratio, sales volume, and average number of employees, which can be compared with long-term averages from your history. "The further back you go, the better. A seven-year trend is a better baseline than the last three or four years." Lerman advises clients to review financial statements monthly, between quarterly meetings with him. "If you budget and plan, you will be able to see your downturn before your competitor."

But suppose your monthly reviews show that your business is booked way out in front and as profitable as ever? Here's what we learned about how to take advantage of today's boom while getting ready for tomorrow's decline. Not surprisingly, most of these suggestions are good business practice in good times or bad.

Conserve your credit. First of all, avoid taking on debt. Overextended credit is small business's worst enemy, and debt-free companies have a better chance of surviving recessions.

Lerman would also look at obligations such as leased space. "If you can see six months down the road, reconsider whether you really need all that space."

Labor cost is another item that is easier to ramp up than to wind down.

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Boom-to-Bust Survival Checklist

- ☑ ***Invest sensibly.*** Buy buildings only if it beats leasing. Pay for new equipment with cash; if you can't afford new, buy used. Consider funding a retirement plan.
- ☑ ***Protect your credit.*** Reduce or eliminate your debt. If you must borrow, be cautious. Don't use the cash from your next job to fund your current one.
- ☑ ***Watch your balance of accounts.*** If receivables start to come in more slowly, build up a cash reserve to handle any shortfalls.
- ☑ ***Be ready to slash overhead.*** Keep an eye on sales: When the work starts coming in more slowly, think about cutting fixed expenses.
- ☑ ***Network, network, network.*** Join organizations, become known in your community, stay in touch with past clients. When leads start to dry up, you'll need those connections.
- ☑ ***Guard your reputation.*** Give realistic estimates, keep your promises, and price within reason.
- ☑ ***Diversify with care.*** Taking a variety of jobs gives you a higher profile. But be careful when straying from your core expertise.

OFFCUTS

Put the laundry near bedrooms where dirty clothes accumulate, say 30% of homeowners, according to an NAHB survey; second choice (27%) was the kitchen. Space-saving stackable washers and dryers in a bathroom near the bedrooms is one practical solution.

Two Hilti powder-actuated tools could be dangerous due to a potential buildup of unburned powder inside the tool. Hilti (800/279-8000) has pledged to fix and return suspect DX A40 or DX A41 models within seven working days. A tool bearing a special emblem has already been retrofitted.

Demand for radiant heating has tripled in the last six years, according to data from the Radiant Panel Association. Shipments for tubing used in hydronic systems reached 99 million feet in 1997, capping a steady progression from the 29 million feet shipped in 1992.

Salad for 600? Stuart Mortimer, a British woodworker, turned the world's largest wooden bowl last November at the American Woodworker Show in Fort Washington, Pa. Measuring 7 feet $9\frac{3}{4}$ inches in diameter, the bowl was carved out of an 8-foot-diameter 4,000-pound slab of Sitka spruce, and is officially recognized by the *Guiness Book of World Records* as the largest in the world by more than 2 feet. We don't know if Mortimer plans to carve serving spoons.

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"We could very easily hire six or eight more people right now, when we're saturated with work," says Luttrell. "But if we did, when the downturn came we'd be laying people off. So instead our guys are working 50 hours a week, and we're filling in with temps."

Wage raises present a similar long-range dilemma: Pay hikes will be hard to take back later when times are tough. Denver, Colo., remodeler Rick Pratt uses a strategy that ties bonuses and benefits to profits. "Our bonus plan is based on gross profit per week per man. If I have to start selling jobs at lower rates, that outlay is self-correcting." Pratt also funds simple retirement plans for his workers, but adjusts his annual contribution when profits drop. Since any retirement plan cutback won't affect their take-home pay, Pratt hopes his workers will stick with him through lean periods. He admits, however, "It was tough convincing them that these benefits were as good as a raise to begin with."

Smart investing. Some extra spending may make sense, however, when your bank account is fat. Iowa builder Bill Eich reasons, "When times are good, it takes good equipment to keep up with the workload; when times are bad, it's also easier to make money with good equipment. So in good times I upgrade our compressors, nail guns, power saws, buy new pickups — but all on a cash basis. We never borrow money to buy equipment."

Luttrell is investing in marketing materials. "Things like brochures — the more you print at once the cheaper they are. So we bought three or four years' supply to get that economy of scale."

Smart marketing. In good times, marketing presents builders with an upside-down problem — too many customers, too little time. Pratt suggests spending less on things like print and Yellow Pages ads, but keeping up a personal presence in the community: "Don't give up the marketing, but do it long term. I put money into an elementary school project, and they put my name all over the community. I coach a local soccer team, and that gets me in front of people."

Relationships matter, says Pratt. "It's okay to cut back on marketing, but not on the people you're loyal to. It's important to return phone calls and keep all commitments and deadlines. People are going to remember that."

Vermont builder Bill Sahlman adds, "What keeps you going through the recession is doing the networking. I tell young builders to join the Home Builders Association, the Lions Club, the Rotary. Those people have money and even during the recession, they will spend on necessities."

Pricing changes. Pratt says he tries to hold the line on pricing in boom times. "I have to constantly remind myself not to gouge these people." But he notes that undercharging in a hot market is also a mistake. "In times like these, people should charge for design. That's not gouging, that's being paid for your service."

For newer contractors who tend to bid too low, says Pratt, "This might be their first opportunity to realize that they can charge a 50% markup. But they have to turn it back into service, use top professional subs, and hire good tradespeople. You can't just charge more money for the same service."

Above all, says Pratt, now is a time to enjoy life. "I think people need to enjoy these times and treat themselves and their families to something. If you can't take time off when times are good, it's doubtful you will when times are tough. Your business isn't worth much compared to your family."

Ted Cushman *is a carpenter and photojournalist who writes frequently on construction topics.*

No Fun in the Sun

If you spend most of your time outdoors on the job site, you may be at risk for melanoma, the most serious type of skin cancer. According to the American Cancer Society, 41,600 people were diagnosed with melanoma in 1998. You are particularly at risk if you:

- **have a lot of moles or freckles, which increase your chance of developing melanoma by six times;**
- **are lighter-skinned, have light-colored eyes, and have red or blond hair;**
- **have a history of severe sunburn early in life;**
- **have a family history of melanoma.**

To protect yourself, wear tightly-woven clothing, hats, and sunglasses, and use sunscreen with a sun protection factor (SPF) of 15 or higher.

Flying Stud No Match for Concrete Wall

Each time a hurricane or tornado smashes buildings and takes human lives, experts redouble their efforts to discover what kind of house best survives high winds. Now, a study conducted by the Wind Engineering Research Center at Texas Tech University may have an answer: Concrete homes. "The results of the test were not surprising, but they were dramatic," Donn Thompson of the Portland Cement Association (PCA) told *Permanent Buildings & Foundations Magazine*. PCA co-sponsored the study.

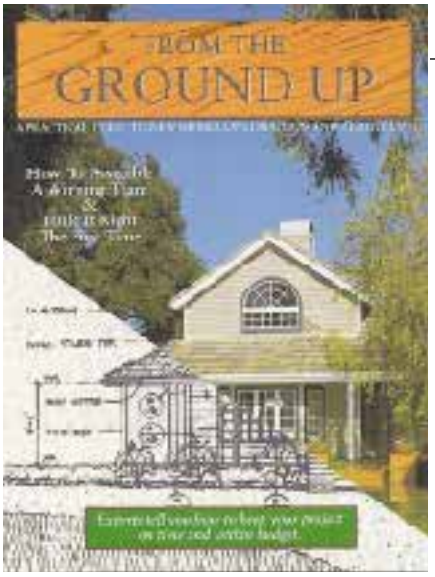
To compare how buildings hold up in high wind, where the danger is not wind so much as the debris it carries, engineers shot a 15-pound 4x4 at speeds from 60 to 100 mph into walls made of various materials. The missile passed through walls framed with steel studs and covered with either vinyl or stucco, and a wood frame wall with gypsum board interior, 3/4-inch plywood sheathing, and vinyl siding didn't slow it down, either. The addition of 3-inch brick veener caused the projectile to stop, but not until it had penetrated and cracked the brick both horizontally and vertically.

But when the engineers tested various types of concrete walls, they were amazed to find that the projectile did not penetrate even a 2-inch-thick wall. In fact, the flying 4x4 didn't even put a dent in any of the concrete walls.

A video of the study, called "Concrete Homes, Built-In Safety" ($4.95), is available from PCA (800/868-6733).

Researchers at the Wind Engineering Research Center at Texas Tech used a launcher (left) to shoot a 15-pound 4x4 into sample walls at speeds of up to 100 mph. While the "missile" didn't even dent concrete (below), walls made of other materials were damaged or destroyed.

Construction Reality Check



A 48-page, full-color booklet from California's 200-member Santa Barbara Contractors Association could help you educate clients about the realities of residential construction. Entitled *From the Ground Up: A Practical Guide to New Home Construction and Remodeling* ($12.95), the book graphically follows a building project from beginning to end and includes a glossary of terms, examples of change orders, and advice on avoiding common pitfalls. Best of all, it stresses building a team comprising the owner, architect, contractor, lender, and building department. To order a copy, call Judy Jennings at the SBCA (805/964-9175; sbca@silcom.com).

Coming Soon:

A Power Plant in Your Basement

Electricity has always been delivered via power lines — you know, the kind that blow down during storms or snap during earthquakes. But soon, dishwashers, computers, and cappuccino makers could be powered by an air-conditioner-sized box in the basement called a fuel cell. A prototype of the new unit is being tested in a small brick home in the Albany, N.Y. suburb of Latham. It is believed to be the first time a fuel cell has powered an entire house.

Here's how it works: Natural gas is brought into a stack of ultra-thin membranes constructed of Gore-Tex, the foul-weather clothing fabric. Hydrogen in the fuel is split into electrons, which provide power, and protons, which react with air to form a water-vapor exhaust that could be captured and reused to heat water as well as the home. Compared with conventional methods, the technology uses less fuel to produce more energy and creates less pollution. Fuel cell manufacturer Plug Power (518/782-7700), which has received $2.2 million in state grants to develop the product, estimates it will be ready to sell fuel cells in 2000 for between $3,000 and $5,000.

If a prototype is successful, hydrogen fuel cells could soon power and heat houses, eliminating the need for electrical transmission lines.

Fill Up or Blow Up?

Filling metal gas cans in the bed of a truck outfitted with a plastic bed liner has caused 23 deaths or injuries, according to *Safety Alert #22*, issued by the American Society for Concrete Construction (ASCC). The pamphlet explains that fuel flowing into a metal container causes the buildup of static electricity. Because the plastic bed liner isolates the gas can from ground, a spark can discharge to the pump nozzle, explosively igniting the gas fumes. To prevent static buildup and discharge, always remove a metal gas can from the truck bed and place it on the ground, well away from the truck.

Copies of this and other safety bulletins are available to ASCC members for $2 each ($4 for non-members) by calling 800/877-2753.

OFFCUTS

Let them freeze in the dark. Y2K problems put 5,000,000 small businesses at risk, according to a study by Gallup and the National Federation of Independent Business. Half of these businesses have decided to put off dealing with the problem until the year 2000.

Lead paint cover-up. Instead of removing lead-based paint, the Chicago Housing Authority has begun to cover lead-painted masonry walls with a rigid-foam-and-gypsum composite. The new wall system not only encases the paint, it provides tenants with a tight, well-insulated, durable interior surface.

Silver lining for hurricanes? Disaster-repair contractors should prosper if the current global warming trend continues. July 1998 was the hottest month in history — or at least in the 118 years records have been kept. Predictions say global warming will bring severe weather patterns, causing powerful storms, flooding, drought, and heat waves. Keep your calendar open.

A new heat pump is 50% more efficient, according to the U.S. Dept. of Energy. A free CD-ROM called "The Generator Absorber Heat Exchange Heat Pump" describes the history, technology, and energy-saving potential of this new equipment, which will be available in 2000. Order via fax (202/586-5557) or e-mail (james.freemont@ee.doe.gov).

Fiber-cement manufacturer calls it quits. American Cemwood Corp. has closed down its sales and production operation due to a drop in demand for its fiber-cement shakes and slate roof tiles. The Oregon company will continue to uphold warranties.

Wiring for the Future

From California's Silicon Valley to Massachusetts's Silicon Alley, savvy homeowners expect the latest home wiring technologies in new homes and remodels. According to Tim Farley, home wiring installation manager and co-owner of Accurate Audio in Grover Beach, Calif., many of the builders he subcontracts with specify Category 5 (Cat 5) phone wire and RG-6 TV cable in current projects. Cat 5 cable is constructed of four pairs of 24 AWG insulated conductors, each of which is twisted together at a slightly different interval. The varied twist-per-inch rates create balanced high-speed communications circuits and reject interference from electrical sources such as house wiring, fluorescent lights, and motors.

RG-6 coaxial cable has a higher capacity, so it can handle a greater number of signals. Its bandwidth is rated at about 1.5 gigahertz (billion bits per second) compared with RG-59's 600–900 megahertz (million bits per second) rating. For home DSS, HDTV, and interactive cable stations, RG-6 does a better job.

"Standard" house wiring has gone high tech with the inclusion of Category 5 twisted-pair control wiring and RG-6 coaxial cable.

In Dallas, Cindy Dietz, operations manager for Centex (one of the nation's largest home builders), states that "Enhanced [control and communication] cabling is standard for more than half the 800 homes we will build in the Dallas area this year."

At the heart of these advanced wiring systems is the distribution panel — a central hub where incoming services, such as telephone and TV, are cabled to individual rooms with the Cat 5 and RG-6 wire. The distribution panel is best located in a central closet or dedicated room to provide easy access to individual "system" panels, including sound and security as well as telephone and TV. If necessary, the panel can be located in a wall recess between studs.

Microsoft, Intel, IBM, and other big corporations have invested millions in control and communications technologies that will use existing house wiring and phone lines, but until those systems are perfected, high-tech wiring installation is far more complex than adding a new outlet. Here are some points to consider:

- Take a tip from the commercial guys and run 1/2- or 3/4-inch EMT conduit to an attic or crawlspace for future cabling needs.
- While the *National Electrical Code* now requires grounding of all electrical systems with a 5-foot ground rod and a cold water pipe bond, the 1999 code will include a new section (800-10 [c]) with provisions for single-point grounding of all wiring, power, and communications systems. A common grounding point limits stray voltages that can interfere with communication signals, reduces shock hazard due to incorrectly installed low voltage wiring, and increases protection from electrical surges, including lightning.
- Insist on qualified installers. A special license is often required to install low-voltage wiring.

Copper Pipes Polluting San Francisco Bay?

One California state agency has ignited a controversy by releasing a report stating that copper pipe corrosion has caused excessive copper levels in San Francisco Bay. The Department of Housing and Community Development also claimed that CPVC pipe is a healthier alternative.

The Copper Development Association (CDA) is fighting back. The CDA's 100-page response claims the state's water tests are flawed, and do not account for naturally occurring deposits of copper. "It's not our goal to keep plastic pipe out of California," said Dale Peters, the copper group's vice president for environment and health. "But we do want to set the record straight where the report contains misinformation and false implications about the environmental effects of copper." The group points to other data showing overall levels of copper have decreased in the last 10 years.

The agency report was part of an effort that would allow CPVC pipe to be used along with copper pipe in domestic water distribution. CPVC pipe is not permitted under current California building codes.

TAX TALK

Use of Company Vehicles Is Income

BY MILTON ZALL

The value of any personal use of a company vehicle by an employee must be included on the employee's W-2 as additional income. Whether you own or lease the vehicle, you can calculate the amount using one of two methods, but you can't change methods from year to year.

Annual lease value method. This method is based on an IRS table that relates the fair market value of the vehicle to an annual lease amount that the IRS has calculated. For a vehicle with a fair market value between $24,000 to $24,999, for example, the table's annual lease value is $6,600. If personal use of the car for the year is 30% of the total usage, $1,980 (30% of $6,600) is the amount of income that must be included on the employee's W-2. The value you choose from the table does not include all operating costs, so you must add insurance, maintenance, and similar costs. If your company pays for gas used for personal use, add 5 1/2¢ per mile to the amount reported on the W-2.

If you own the vehicle, the table's "fair market value" is the amount you paid (including sales tax, title, etc.), plus operating costs. If you leased, use the invoice price, the manufacturer's suggested retail price less 8%, or the retail value in a recognized pricing guide like the "Blue Book." You must also prorate any up-front or back-end payments. For example, an advertised 36-month lease may be $399 a month with a $1,500 down payment. Divide the $1,500 by 36 to get the monthly cost ($42) and add that amount to the $399. And don't forget any additional charges for excess miles over the allowed amount. Add all of these costs to the total from the table before calculating the percentage of personal use.

You can revalue the car after four years or if the car is given to another employee. In the example above, the $6,600 will apply for the first four years the car is used by the employee.

Fair market value. Using the fair market value method, you would report as employee income the amount the employee would have to pay to lease the vehicle. If the vehicle is actually leased, use the lease amount. If you own the vehicle, you must find out what it would cost to lease the vehicle.

Make sure the lease you use is comparable, and keep good records to show how you arrived at the lease value. Otherwise, an IRS audit could create problems, particularly if you are not actually leasing the car. Unless you use the IRS table, the value you attribute to a car is subject to IRS challenge; this means using the fair market value method is not worth the trouble unless the savings are substantial.

Use the method that gives you the highest tax deduction. The IRS table has not been updated for a number of years, so it may yield lower amounts.

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