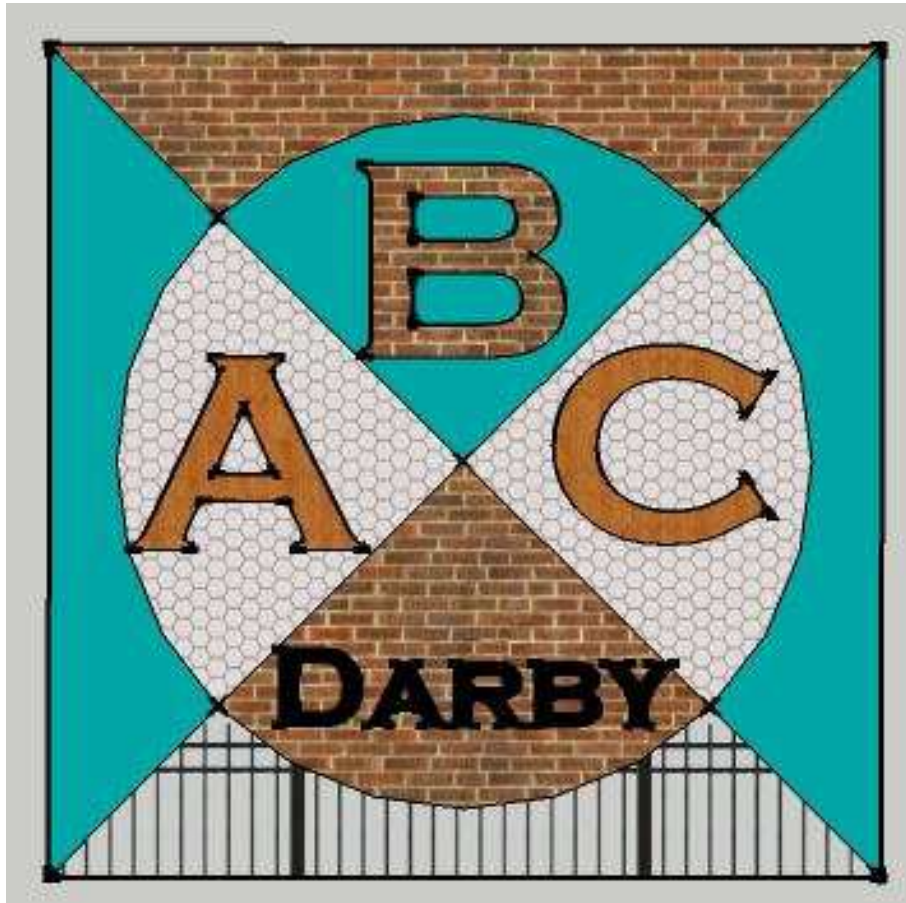


(HEALING HISTORY)
VALLEY HOUSE LLC
ACADEMY OF BUILDING CONSERVATION



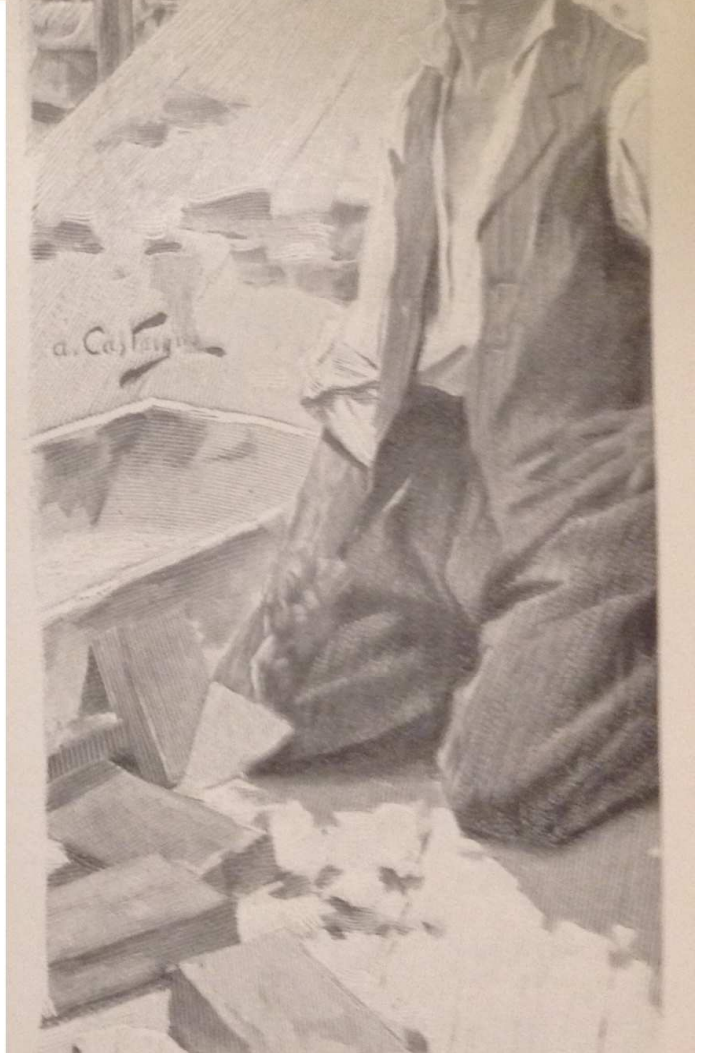
(Draft Business Plan)

Contact:

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It's hard and sometimes dirty work
But my family all is fed.
I know what I created
When at night I go to bed
Working in a cubicle
My life and soul was dead,
So now I build, and craft, and shape
And use my hands instead
The monuments I build will last
And pass the test of time
In future years I'll come and look
And know this work was mine



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**NOTHING THERE IS THAT DOESN'T NEED WORK
AT LEAST ON THIS SIDE OF DEATH
MAKING A LIVING OR BEING IN LOVE
OR EVEN WHEN DRAWING A BREATH**

**WE ARE PUT HERE ON EARTH
WITH OPPOSABLE THUMBS
ABLE TO WORK PEN AND TOOLS
TELLING OUR STORIES IN WORDS AND IN BRICK
LEARNING BY DOING IN SCHOOLS**

JOHN HAIGIS 4/7/17

Background/Summary:

Valley House LLC a public/private partnership organized by the Not for Profit Friends of the Blue Bell to create new life and opportunities for buildings, people, and communities by

- 1) Leasing, owning, or otherwise accepting stewardship of compromised structures in the Delaware Valley and using those structures to teach skills of conservation including but not limited to basic carpentry, plaster, and wooden window repair.
- 2) Serving as an informational resources for individuals and organizations on topics of building conservation and the recognition, appreciation, adaptive reuse, repurposing, rehab, preservation, and utilization of historic assets.
- 3) Providing benefits for partner members including but not limited to promotion, trained workers, advice, networking, tax benefits and profits.
- 4) Providing other benefits for which corporations may be chartered in the Commonwealth of Pennsylvania.

The Friends of the Blue Bell was chartered in 1985 to lease preserve, restore and utilize the Historic Blue Bell Inn on Cobbs Creek and surrounding area for the educational and cultural enrichment of the Delaware Valley. It is the fiscal sponsoree of the Academy of Building Conservation and in 2015 created Valley House LLC as a method to accept stewardship of the Valley House, a circa 1844 stone structure located on a greenway along Darby Creek and owned by Upper Darby Township, Delaware County, Pennsylvania. Although the Township indicated willingness to transfer stewardship of the building for a nominal amount with an agreed to timetable for restoration, at a certain point the Township changed its mind and on December 17, 2015 voted to demolish.

Although the Valley House itself is lost, the need to appreciate, understand, recognize, preserve and utilize our endangered historic legacy continues. For this reason the Academy of Building Conservation/Valley House LLC was created. Drawing on the successful “Career Academy” model pioneered in Philadelphia, and also inspired by programs such as College of Building Arts in Charleston, S.C , GalGael, the Scottish program that provides learning experiences anchored in practical activities that offer purpose and meaning, and traditional apprentice programs, the Academy will benefit from its strategic location and transportation network to become, as far as possible, a self-sustaining regional resource. The Academy can also be a resource for experienced workers to gain new skills and a resource for stewards of heritage sites, and a catalyst for heritage tourism. Revenue can be generated doing projects for private developers and from sales of student’s crafts and projects. Economic and cultural benefits of the academy include jobs, tax revenues, increased productivity, environmental sustainability, and improved quality of life. Entrepreneurs could revive properties at lower cost (as was done during the Great Depression of the 1930s) and the Academy can also serve as a regional resource for the stewards of historic assets.

The Educational model is training in cadres of ten, using a variation of the medical school model, watch one, do one, teach one, and it is hoped trainees can then train future cadres.

Statement of Need:

According to the US Census, in the year 2000, there were approximately 25 million occupied housing units in the United States. Of that number, more than 15 million were constructed before 1939 <http://www.census.gov/prod/2003pubs/c2kbr-32.pdf> (Pg 12). Many of these structures have “good bones” and solid construction and while they may be in need of care and energy upgrade, they may be unrecognized assets, particularly in our older first-Ring suburbs. The economic benefits of historic preservation are now becoming better known as people begin to realize the greenest building is the one that is already built because of the embodied energy of materials and past investment. Our older buildings can be future assets. Taking care of these older buildings, many of which have plaster and wooden windows, requires a special skill set but because very few people are trained in the necessary skills, there is a need for skilled people. The Academy of Building Conservation is a way to turn a problem into an asset by using these older buildings needing care to train people in traditional methods and crafts along with new technologies to increase vocational opportunities and improve quality of life for residents in these economically challenged “first suburb” communities

Building conservation is somewhat different from restoration and can be defined as is a way to extend the useful life of a building as long as desired in ways that are in harmony with the building’s legacy. Older buildings simply make us feel better.

The economic benefits of historic preservation are now becoming better known as people begin to realize the greenest building is the one that is already built because it represents a past investment and future asset. Students can create lucrative, lifetime careers extending the life, value and usefulness of our architectural heritage. Every building is different and not every building is appropriate for a "historic" designation but every building can benefit from appropriate care, people can benefit from learning useful skills, and communities can benefit from the appreciation, preservation, and utilization of existing assets.

An initial project is turning 1000 Main Street in Darby Borough, a challenged circa 1852 frame structure with “good bones” into a “green,” sustainable, multi-purpose building



Valley House LLC Functions, Features and Benefits

Functions:

Repair/re-use of the Valley House /1000 Main, other older structures
Clearing house for information
Rehab of Rowhouses
Hands-on training in techniques of working on older houses
Training and advice on energy upgrade
Sponsor workshops on materials and techniques
Sponsored Training programs including “Working History Training Camp for Traditional Building Trades”
Building forensics/ Analysis of present conditions (What is, what can be, and how?)
Planning for future actions
Certification of capability- “Seal of Approval”
Assist Real Estate Agents in preparing properties for sale
Testing new techniques and materials for energy conservation
Providing advice to municipalities, individuals, and companies on dealing with older houses
Creating new life and opportunities for buildings, people, and communities

Features:

Flexibility, providing profit to investors, tax breaks to donors, services to organizations and municipalities
Different levels of participation and affiliation. All Partners agree to give a 10% discount to other Partners.

Benefits for students

Training and skills
Structure
Build a resume
Possible stipend for training subsequent students

Benefits for Contractor Partners

Trained employees
Marketing/promotion/advertising/outreach
Listing on web site
Technical assistance
Networking
Tax benefits

Benefits for Municipal Partners

“Problem” buildings returned to productive use
Networking across municipal boundaries
Education
Technical advice
Enhanced quality of life
Better utilization of historic resources

Benefits for Non-Profit / Individual Partners

Assistance with building issues
Training
Fundraising assistance
Cost-effective repairs
Information on resources
Networking

GOVERNANCE/FINANCE/METHODOLOGY:

There will be four classes of membership with qualifications set out by the Governing Board from time to time:

Equity Partner Members are those individuals and organizations willing to commit a certain level of money, time and/or services to the entity, who will be able to benefit from their investment.

Municipal Partner Members will be those organizations who support the mission in various ways.

Contractor/Business Partner Members are those individuals and companies willing to invest in the entity in expectation of a return. These can include contracting companies who may use the rehabilitation process to train personnel, or investors who may have interest in participating in the business.

Non-Profit / Individual Partner Members are those individuals who support the mission and the organization in various ways.

Any fees may be waived for good cause by an affirmative vote of the majority of Managers.

Valley House LLC will have a **Governing Board** of five (5) people chosen by the equity partners with two (2) additional people chosen by the Municipal Partners, Contractor Partners and Non-Profit/Individual Partners for a total of seven (7). The Governing Board shall choose one or more Managing Partners to manage the day to day operations who shall serve until their successors are elected and duly qualified.

The entity initially will be organized by John Haigis who will be responsible for overseeing the creation of a Governing Board of seven (7) Partner Members who will be appoint a Manager or Managers responsible for the operations of the entity. The manager(s) shall serve for one year or until a successor has been duly chosen and elected.

(Proposed)

All Partners agree to provide a reciprocal 10 % discount to other Partners

Membership fees for the various classes will be established from time to time by the Governing Board.

WORKING HISTORY

A Training Camp for Traditional Building Trades (Summer - 2017)

Who: 10 carefully selected students as the first cadre (10th Grade and above)

What: Hands-on introductory training in basic carpentry and traditional building skills and theory (Proposed Curriculum below)

Where: Darby, beginning at 1000 Main Street (includes field trips by trolley, etc)

When: Beginning Tuesday, June 21 for 12 sessions (Tu,We,Th) ending Thursday, July 14

How: Proposed curriculum attached. Generally 1-2 hours of classroom work followed by hands-on experience

Why: Students will gain experience toward gainful employment, enhanced understanding of our built environment, greater appreciation of area historic sites, fun hands-on learning. Their hard work will earn them a certificate of completion to enhance their resume. Successful completion may qualify them as Student Instructors going forward

Benefits to Partners include positive publicity, listing on web site, first dibs on trainees, possibility of having quality work done, etc.

Cost: \$250 per student. Scholarships up to \$200 may be available provided by non-profit and business partners

Program will be under the auspices of Valley House LLC, the Academy of Building Conservation, and other Non-Profit and Business Partners.

Selection of the initial cadre of 10 will be very rigorous. We will be looking for people with curiosity and enthusiasm. Part of the application process will be an essay on why preserving our past is important. If someone is on a career track for architect or in the building trades, or simply exploring options, this may be helpful.

Curriculum includes field trips to Bartram's Garden, the Grange Estate, Swedish Cabin, Masonic Temple, etc, etc. (Including sites in Darby and Southwest Phila: Meetinghouse, Fullers Row, St. James, Mt. Zion, etc)

Possible Curriculum Items under discussion:

300 years of style- the evolution of Pennsylvania architecture

Introduction to structural analysis (What Is? What Can Be? - creating the critical path)

Practicing safe demo

"Like for Like," "repair rather than replace," "reversible work" and other schools of thought in historic preservation/Conservation

Introduction to types of wood and methods of working with wood

Repairing wood (consolidation, epoxys, etc)

Techniques of wooden window repair

Introduction to tools and techniques

Getting plastered (techniques of flat and decorative plaster)

Scagliola

Maintenance Issues

Lead Safety/EPA Certification

Intro to accounting, book-keeping, research, and business.

Intro to metalwork and blacksmithing

Week One: Masonry

Day One: Introduction to Brick, Stone, Mortar- Students are introduced to different stone, brick, and mortar types and what the proper procedure for repointing joints. Hands on segment would consist of laying walkways, mixing mortar, and repointing a small section of wall.

Day Two: Laying Stone and Brick- Building on the experience of the previous day, students would actually build a small retaining wall, short sections of which would be in dry stone, mortared stone, and brick.

Day Three: Field trip to a site with dry stone, mortared stone, and brick.

Week Two: Woodworking

Day One: Introduction to Wood Types and Joinery- Students would be introduced to the different types of wood used in construction, production methods, and joinery. Hands on segment would consist of preparing wood for using in building a small stool or something equally as simple using basic hand tools.

Day Two: Basic Joinery- Students would learn how to do a proper mortise and tenon joint using drills, chisels, and other hand tools. They would build a small piece of furniture to take home.

Day Three: Field Trip to a site which exhibits fine mortise joints, timbers, etc.

Week Three: Plastering

Day One: Basic Plastering- Students would be introduced to the materials needed in plaster work. Hands on segment would consist of the first coat of a small patch on a wall using lime and sand plaster.

Day Two: Finishing Plaster- Students would put a finish coat on the small patch begun the previous day.

Day Three: Field trip to a site offering different types of plastering and ornamental plaster.

Week Four: Blacksmithing

Day One: Introduction to Blacksmithing- Students would learn how a forge works, different fuels, the characteristics of different metals and the history of metal working in America. Hands on segment would consist of making a nail.

Day Two: Metal Bending- Students would learn how to thin out, bend, and punch metal. Hands on segment would consist of building some simple object to take home.

Day Three: Field trip to Yellin.

Proposal for Conservation of Rowhouses

Academy of Building Conservation

www.DarbyHistory.com/Academy1

(Draft - 2/23/16)

Question: What is the difference between a rowhouse and a townhouse?

Answer: About three zeros.

The above may point out a truth about the power of perception and marketing, but also can suggest it perhaps is time to take a new look at the humble rowhouse. With two existing warm walls, insulation on the roof, insulation front and rear, reconditioned windows, heat recovery ventilation (HRV), and renewed plaster, a row house can be an energy efficient structure at modest cost. The Healthy Rowhouse Project estimates that for the minimum of the \$300,000 it takes to build a new affordable house in Philadelphia, between 14 and 30 homes can be improved. Preserving rowhouse blocks builds on architecturally significant assets. Preserving existing resources is environmentally sustainable. The most sustainable home is the one that already exists.

<http://healthyrowhouse.org/recognizing-the-opportunity/>

The first step is to evaluate building and components for structural integrity from foundation to roof. What repairs are needed? What is the condition of existing components? joists? walls? windows, etc. How many layers on roof? What is the scope, sequence and critical path of work?

A flat roof on a row house may present an opportunity to cover the roof with light weight insulation such as 6" Polyiso panels (about \$30 each at Home Depot) which then can be covered by EPDM (\$350 for 10' x 50' roll). A 15 x 25 roof (375 sq') would then take about 12 panels (\$320) and could be done with one roll of EPDM . The condition of roof and number of existing layers will guide planning. (estimate \$2,000)

Heat Recovery Ventilation is a way to warm incoming air coming into the house which reduces heating load (not having to raise incoming 30 degree air so far to a comfortable level)

https://en.wikipedia.org/wiki/Heat_recovery_ventilation Can an air intake at the top of the house gather heated, stale air and then send fresh, warmed air to the basement where it will rise? Can triangular tubing where the wall meets the ceiling be decorative AND functional? Can heat be exhausted in the summer so that only fresh, cool air is circulated? (Est \$3,500)

Wooden windows are good windows. Historic windows, particularly those made before the 1940's, are from old growth wood which is denser and stronger than modern equivalents and are built with components (stile, mutton, etc) that can be repaired or replaced....which means less waste going to a landfill with equivalent efficiency, better cost savings, and better aesthetic appeal. Design and proportions matter. Windows are the eyes of a house, and eyes are the windows to the soul. (Est \$1,500)

Diathonite is a rediscovery of an ancient method and is a type of insulating plaster made from diatomaceous earth, hydraulic lime, cork and clay which breathes and has excellent dehumidification and sound absorption qualities. Non-toxic, it can be used for interior or exterior applications and can be sprayed on. It is rated 3.2 R value/inch. <https://www.diasen.com/sp/en/d/diathonite.3sp> (Est \$2,000)

Plaster is in virtually every building built before 1940 but people trained in the skill of plastering are rare, so quality work may be prohibitively expensive. Tearing out plaster instead of repair results in more expense in disposal of plaster and lath, with a less aesthetic, fire-resistant, sound absorbing result. The best way to learn is through hands on training under experienced supervision. The Academy offers an opportunity to learn, and upon completion of the module, to train newer students. (Est \$1,000) (Total \$10,000)

DRAFT CURRICULUM FOR CERTIFICATE PROGRAM

Upon successful completion of this program, the student should be able to demonstrate a basic understanding and skill in areas of General Historic/Vintage Project Site Evaluation, Landscape, Foundation, Wall and Roof Diaphragm, Finishes, Roofing, HVAC, Electrical, Mechanical and other elements of modernity.

1. Understand/Interpret plans and scope of work, Identify the different structural components of a buildings and their sequence as it relates to construction.
2. Understand and evaluate structural components (Building Forensics)
3. Plan desired outcomes.
4. Demonstrate skill in repair of wood including the use of epoxy, consolidates, and the like.
5. Work with the rehab and repair of wooden windows
6. Understand and demonstrate techniques of flat and decorative plaster
7. Demonstrate and reflect comprehension of applicable historic masonry methods as applied to the required means and materials for restoration
8. Understand traditional methods of HVAC, working with nature and new technologies.
9. Understand traditional insulation and techniques and materials of modern retrofit
10. Demonstrate ways of dealing with moisture infiltration, rising damp, etc
11. Demonstrate techniques the unobtrusive insertion of modern mechanical/electrical systems with awareness of "reversibility" and "continued serviceability" without altering vintage fabric or original context.
12. Understand Federal/state/local financial incentives to upgrade for energy-efficiency.
13. Understand and demonstrate work site safety procedures (lead, asbestos, etc)
14. Demonstrate an understanding of, and methods of working within, the Secretary of the Interior Standards and well as other protocols such as the "Burra Charter," and the "Venice Charter".
15. Understand methods of conservation lighting including LED and glass fiber optics.
16. Interpret building specifications and regulations as they relate to building construction.
17. Understand building codes including the "Existing Buildings" provisions of Chapter 34 of the 2009 International Building Code, pg 571-586
18. Estimate carpentry materials and labor costs to complete a project.
19. Demonstrate and complete a "traditional carpentry" amendment
20. Repair cracks and holes in plaster, apply a skim coat over existing substrate
21. Perform finished carpentry work. (Build/re-build wooden sash window?)
22. Repair clapboard, stucco, and other siding.
23. Understand the reasons for the three part baseboard (toe, board, cap)
24. Estimate needed roofing and siding materials.
25. Install standing seam and other metal roof materials.
26. Flash hip-valley and ridge roofs according to specific application.
27. Apply wood shingles and shakes to siding.

Conservation Craft and Supply

Goal: To become a center for conservation activities in the Mid-Atlantic Region and produce revenue for activities Operated by Friends of the Blue Bell, Valley House LLC and Partners

To avoid the need to carry a large inventory, much of the commerce will be done through catalog sales including hardware, tin ceilings, specialty tools, books and other educational materials

Items proposed for sale in the store include:

Diathonite (Insulating Plaster) <https://www.diasen.com/sp/en/p/diathonite-evolution.3sp>

EPDM <http://www.epdmroofs.org/what-is-epdm>

Heat Recovery Ventilation <http://www.popularmechanics.com/home/interior-projects/how-to/a149/1275121/>

Charcoal, hewn timber, ironwork, etc. made by Bill Birney of Hiraeth Restorations LLC
<http://www.hiraeth-restorations.com/>

Other types of plasters including hemp-crete <http://www.americanlimetechnology.com/what-is-hempcrete/> and <https://en.wikipedia.org/wiki/Hempcrete>

Tools for masonry, plastering, blacksmithing, etc

We are also considering being a source for fixtures, etc (inspired by Renovator's Supply) and antiques.

Academy Boot Camp

There is a situation on a local middle school where a small group of disruptive students make it difficult for the majority of students to get an education. A number of years ago, Philadelphia had the same problem and a partial solution was an Academy where students were mentored and taught a trade in a respectful but disciplined atmosphere

There are a number of programs to use as models including the Williamson College of the Trades as well as Gil Gael, a Scottish program, Vision Quest, Scared Straight, and other programs.

It is possible such a program could counter the attraction of the "thug" lifestyle, channel currently destructive energy, and provide disaffected middle school minority students (male and female) with structure, direction and possible employment.

At the start of the 20th Century, the North Bennet Street School near Boston taught skills to immigrants so they could be useful to themselves, their families, and to society. This may be worth another look.

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Additional Documents

Inspirations, Sponsors, and Partners

Friends of the Blue Bell

Academy of Building Conservation

Building Conservation International

John W. Haigis, Esq

Alvin Holm, AIA, Architect

Jan Haigis, Educator

Bill Burney, Hiraeth Restorations, LLC

Kenneth Coles, Craftworker

Thomas Smith, Historian

Norman T. Glass, Restoration Contractor

Emeritus/

Gersil Kay, Lighting Specialist

Table 2.

New and Old Units by Tenure and Units in Structure: 2000(Data based on sample. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www.census.gov/prod/cen2000/doc/sf3.pdf)

Type of structure

Type of structure	New units (built 1995 to March 2000)		Old units (built 1939 or earlier)	
	Number	Percent	Number	Percent
All occupied housing units . . .	9,945,989	100.0	15,735,979	100.0
1, detached or attached	6,571,383	66.1	10,899,321	69.3
2 to 4	418,344	4.2	690,493	17.1
5 to 19	761,656	7.7	1,019,574	6.5
20 to 49	266,309	2.7	497,164	3.2
50 or more	405,968	4.1	530,300	3.4
Mobile home	1,499,754	15.1	94,129	0.6
Other*	22,575	0.2	4,998	0.0
Owner-occupied housing units . .	7,654,775	100.0	9,935,649	100.0
1, detached or attached	6,094,464	79.6	8,879,565	89.4
2 to 4	68,355	0.9	472	8.0
5 to 19	77,020	1.0	807	0.8
20 to 49	20,726	0.3	266	0.5
50 or more	29,700	0.4	508	0.7
Mobile home	1,344,519	17.6	54,754	0.6
Other*	19,991	0.3	2,277	0.0
Renter-occupied housing units . .	2,291,214	100.0	5,800,330	100.0
1, detached or attached	476,919	20.8	2,019,756	34.8
2 to 4	349,989	15.3	1,894,021	32.7
5 to 19	684,636	29.9	936,767	16.2
20 to 49	245,583	10.7	447,898	7.7
50 or more	376,268	16.4	459,792	7.9
Mobile home	155,235	6.8	39,375	0.7
Other*	2,584	0.1	2,721	0.0

*Other includes, for example, boats, recreational vehicles, and vans.

Source: U.S. Census Bureau, Census 2000 Summary File 3.

A philosopher welder or poet plumber
May be hard to understand
A person who knows how to work with the head
As well as with the hand

There used to be more of a balance
In the guise of the Renaissance Man
or Woman who could weave a life
From a multitude of strands

In this age of specialization though
We are forced to be one or the other
Technology and the humanities
Are seen as feuding brothers

But one may ask why that should be
Underneath our common skies
As too many philosophy majors ask
Do you want that order with fries?