Chapter 11

Understanding the Investment Consultant
Investment Consultant. An individual, or firm, that provides, for a fixed fee, a fee based upon a percentage of assets or a fee derived from brokerage commissions investment advice. Such advice generally includes analysis of portfolio constraints, setting performance objectives, counsel for asset allocation, and services to evaluate, select and monitor investment managers.
• The fund's fiduciaries, the investment consultant and the investment manager(s) form a team, each contributing his or her own expertise in the cooperative quest to add value to the plan's portfolio from investment operations.

• The improvement in return from following in Investment consultant's recommendations often more than pays for his or her fees and expenses.

• How the consultant is structurally positioned to serve the fund is important if his or her contribution is to be fully exploited in the process of decision making.

• "Crunching the numbers" is merely a place to begin. When evaluating an investment manager, the consultant is evaluating an enterprise that is people-intensive and must allocate time to meet with those players who will most influence the achievement of return.

• The increasing use of index funds, benchmark portfolios, futures and options has resulted in part from the consulting industry's much for better "mousetraps."

HISTORY

In the pre-ERISA years of the 1950s and 1960s, most representatives of plan sponsors delegated the management of their pension plan portfolio to the trust department of the local bank. The trust officer supervising the account counseled the sponsor on the asset mix and the selection of the individual bonds and stock positions to be placed in the portfolio. The sponsor was content to meet all his or her investment management needs through one professional organization. The trust officer served in the role of investment counselor in the full sense of the term. Had it not been for a combination of relatively poor investment returns and the banks' overdependence on a narrow set of investment classes, single 'balanced manager' relationships would be more prevalent today.

In the 1970s, plan sponsors - seeking broader diversification and improved performance - lifted their horizons toward other management alternatives. Sponsors wanting to replace their managers or to add managers needed not only to increase their understanding of the other classes of investments available, but also counsel as to how they may propitiously weight their portfolios among a set of investments with wider opportunity. In such a demanding environment, the investment consultancy industry was born. Adding impetus to this need for resourceful counsel was the passage of ERISA in September 1974 with its requirement that the courses of action pursued by fiduciaries of employee benefit plans must be performed at the standard of a "prudent expert."

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Investment consultants come in all sizes, shapes and forms. The individual or firm can be fully independent or affiliated with an actuarial or brokerage firm. The consultant may be a subsidiary of a financial conglomerate. To a lesser degree, contract administrators, attorneys and accountants are often involved in consulting activities, particularly among the smallest plans. Many securities brokers also provide consulting services to the smaller plans.

LARGE CONSULTING FIRMS

Large employee benefit plans ($50 million and above) often seek consultants who offer a broad range of services. These providers of "one-stop shopping" service generally are nationwide in scope, have invested significantly in research and data analysis capabilities, and offer a broad menu of consulting services.

Continuing counseling services offered by the larger consultants include the following:

- Analysis of plan constraints
- Setting investment goals and objectives
- Development of policy and strategy
- Development of managerial guidelines
- Counsel for asset allocation
- Evaluation, selection and monitoring of manager
- Measurement of performance and analysis of return attribution
- Selection of master trustee/custodian bank

Specific consulting assignments, either one-time or continuing include the following:

- Evaluation of specialty strategies and/or products
- Analysis of portfolio transactions/audit services
- Design of benchmark portfolios
- Creation of software products
- Other specialized studies.

Some of the larger firms also offer continuing educational opportunities through seminars and the regular dissemination of proprietary research data. Thus the principals of the client funds can avail themselves of as much, or as little, of the input offered by their consultant.

SMALL CONSULTING FIRMS

At the other end of the spectrum are the "one person consulting shops" and the smaller "boutique" firms. Many of these consultants either target a specialized set of clients or limit their consulting to a geographic area. They may generate their own analytical software support or purchase what they need from a firm that maintains a large database. The smaller consultant with little overhead can certainly work "cheaper";
whether he or she also can work "smarter" varies from consultant to consultant. With the proliferation of smaller defined contribution plans, including sizable self-directed IRA rollover accounts, the larger securities brokerage firms are internally organizing and training their brokers in consulting to exploit the growing needs of these smaller clients.

An example of the services typically provided smaller plans by the broker-consultants is as follows:

- A plan review process to identify the fund's needs and objectives, and to recommend the appropriate policy, strategy and management guidelines
- An evaluation of the process to screen and select the manager
- A monitoring process that measures the manager's performance and provides a statistical synopsis of those fund components leading to the aggregate results.

In return, the improvement from following an investment consultant's recommendations often more than pays for his or her fees and expenses. For funds that have in the past "not minded the store", immediate cost savings activities can often be implemented in the areas of cash management, securities trading and custodian bank operations.

THE FUNCTIONS OF THE CONSULTANT

A consultant can also enhance the potential for return by restructuring the investment management program. The restructuring process may create a similar or preferred risk posture while also reducing expenses. The increasing use of index funds, benchmark portfolios, futures and options has resulted in part from the consulting industry's search for better "mousetraps."

The following question is often raised: If the consultant is so smart, why isn't he or she managing money? Perhaps the consultant would be if he or she chose to concentrate the intensity of his or her efforts on portfolio management. But the resources the consultant provides to his or her client's result from a different discipline than the buy/sell selection process. The consultant's counsel is more multidisciplinary and multiasset in nature than the typical investment manager's. The consultant cultivates a broader macroperspective. To succeed, the investment manager must by competitive necessity concentrate on microanalyses within his or her specialized area of the market. If the consultant is to process information more efficiently and successfully than do his or her peers, then the consultant does not have the luxury of also researching emerging technologies in other areas. Thus the fund's fiduciaries, the investment consultant and the investment manager(s) form a team, each contributing his or her own expertise in the cooperative quest to add value to the plan's portfolio from investment operations.
How the consultant is structurally positioned to serve the fund is important if his or her contribution is to be fully exploited in the process of decision making. The consultant can be "called alongside" to assist the named fiduciaries (often serving as a co-fiduciary) in the discharge of their investment-related responsibilities; retained as an "extension" of the in-house investment staff to enhance their technical resourcefulness; or hired on a specific assignment basis, ad hoc or continuing, to assure the supervising group that their specific investment responsibilities are professionally addressed.

The investment consultant is engaged in a delicate balancing act. The investment consultant's first priority is to his or her clients; they have the first call on the consultant's time. To serve clients resourcefully, however, the consultant must also spend time evaluating newly emerging strategies and technologies, and hundreds of managers. Not only is the consultant selling his or her expertise, but the consultant is also selling his or her time. Thus management of his or her time is a continuing challenge.

The consultant has observed with envy the asset-based fee structure investment managers have traditionally enjoyed. Since many consulting firms find it difficult to leverage billings for their "hours plus expenses," it is no wonder many of the larger organizations have chosen in recent years to enter the leveraged money management business by creating commingled accounts. They have accomplished the transition to providing investment management services by leveraging both their database for money manager performance and their captive stable of consulting clients who are the most logical prospects to whom to sell their new commingled vehicles.

Unfortunately, a consultant who also provides investment management services runs the risk of being perceived by prospective clients as having lost the objectivity of a third party. Although this may be perceived as a problem, most clients are concerned more with substance than with image. With the proper internal safeguards, consultants with professional integrity should be able to fold in various collateral business activities without compromising the integrity of their primary consulting business.

With consulting organizations moving into the business of investment management, and large multiasset class investment management organizations providing one-stop shopping" opportunities, perhaps we are returning to some degree to the single, balanced manager arrangement. Although this limited relationship of decision making did not work well in the 1950s and 1960s, it may very well prove to be cost efficient now because of the expanded resources of the "new" balanced managers. Global, multiasset, allocation counsel, passive, passive-plus/active management choices are now all available under one management umbrella. Whether the organizational genesis of this new breed of balanced manager is the consulting firm that evolves into the money management business or the money management firm that has broadly diversified its menu of services, "financial conglomerates" are emerging as formidable competitors in providing investment counseling services to employee benefit plans.

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To manage his or her time efficiently, the consultant must absorb, process and evaluate a great deal of information speedily and insightfully. With the recent proliferation of investment management firms, products and strategies, a consultant engaged in manager search activities must either build his or her own investment manager database or pay for the access to an existing one.

Even with such a reference database, this is only the beginning. Then the consultant must somehow determine whether a candidate manager can perpetuate past success.

There is no substitute for "kicking the tires" of a candidate firm through onsite visits. These are time consuming but necessary. The consultant ultimately must assess the philosophy, vision, discipline and management skills of the leadership of a candidate firm for it is the leadership that controls the destiny of the underlying organization.

"Crunching the numbers" is merely a place to begin. When evaluating an investment manager, the consultant is evaluating an enterprise that is people-intensive and must allocate time to meet with those players who will most influence the achievement of return.

The fiduciaries of the fund must decide whether they are justified in spending fund monies for consulting services. In most instances, the addition of the consultant into a fund's "decision making loop" results in improved operations and returns. How the consultant is positioned to serve and what services he or she is retained to provide are both critical decisions to be made.
WURTS & ASSOCIATES

is in the business of

providing value-added expertise

that enables institutional investors
to prudently discharge their
fiduciary responsibility.

Our mission is to

provide independent, objective
advice that will help our
clients gain the most value
from their professionally
managed assets.
THOSE RESPONSIBLE for supervising their organization’s institutional investments routinely make multi-million dollar decisions. Today, these decisions must be made in a rapidly changing environment. More volatile markets, an increasingly global economy and the introduction of new and complicated financial instruments make the job of fulfilling fiduciary responsibilities much more challenging.

Wurts & Associates is committed to providing investment advice that enables institutional investors to make well-informed decisions.

Our clients, whose assets total in the tens of billions of dollars, include educational and charitable organizations, corporate and public retirement funds, health care and financial institutions, Taft-Hartley trusts and substantial net worth families. No matter the type of client, however, our sole aim is to provide the best investment advice possible – advice which is independent, objective and specifically tailored to each client’s unique needs.

In the pages that follow, we illustrate some of the ways we help our clients maximize the value of their professionally managed assets.
ENHANCING CLIENT EFFECTIVENESS

Improve Investment Performance

Making sound strategic decisions on the structure of a portfolio has a profound influence on investment results. Although there are many other factors involved – a well-designed investment policy, the use of innovative investment strategies, thorough due diligence in the selection of investment managers – studies have shown that over 90% of a portfolio’s relative variation in investment performance is attributable to asset allocation.

Wurts & Associates increases its clients’ investment performance by:

- Thoroughly understanding a client’s objectives and constraints
- Using sophisticated analytical tools to help arrive at an appropriate asset mix
- Maintaining a systematic and comprehensive manager research process
- Controlling performance “slippage” – through rebalancing, securities lending, transition management and other strategies
- Explicitly considering costs as part of the overall investment strategy

Fulfill Fiduciary Responsibility

For those responsible for overseeing an organization’s investments, it is important to make decisions in accordance with appropriate fiduciary standards and to be aware of all the implications of one’s investment decisions. Unfortunately, this often requires expertise that most fund sponsors do not possess.

Wurts & Associates helps fiduciaries fulfill their responsibilities by:

- Designing an appropriate customized investment policy statement
- Independently monitoring performance and guideline compliance
- Controlling investment expenses
- Providing expert advice on investment matters

Improve Investment Knowledge

Those responsible for making investment decisions – whether they are the fiduciaries responsible for supervising the organization’s investment portfolio, a family office professional or participants in a defined contribution plan – need to be well informed.

Wurts & Associates educates decision-makers by:

- Providing research on new asset classes and investment approaches
- Interpreting economic and financial developments in the capital markets
- Conducting educational presentations on such topics as real estate, global investments, derivatives and alternative investment strategies
- Publishing research on topics of interest to institutional investors
- Designing educational programs that enable participants to make prudent investment decisions and effectively plan for their retirement
Risk Control

Managing risk is essential to a well-designed investment strategy. Controlling risk, however, does not mean eliminating it. Instead, an intelligent investment policy should mitigate risk and even exploit it at times.

Wurts & Associates controls risk by offering:

- Guidance in defining appropriate risk parameters
- Measurement of the risk inherent in each investment strategy within the context of the fund’s goals and objectives through a risk-budgeting process
- Well-defined guidelines to help reduce unwanted risk

Expense Management

Controlling costs is an important fiduciary responsibility, but one which is often lost in the focus on returns. In particular, complicated fee structures and transaction costs often make it difficult to accurately assess the expenses a fund incurs. Our experience in negotiating fees and in understanding trading costs allows us to increase the fund sponsor’s leverage in negotiating with investment managers, custodians, brokers and other vendors.

Wurts & Associates reduces costs by:

- Designing a portfolio structure that explicitly considers expenses
- Controlling transaction costs
- Negotiating more favorable vendor fees
- Constructing performance-based fee programs where appropriate
- Managing transitions

Extend Staff Resources

Prudent stewardship of institutional investments requires considerable attention. Many institutional investors realize they do not have the staff, time or resources to manage their investments as effectively as they would like.

Wurts & Associates extends staff resources by providing:

- Analytical support necessary for making important decisions
- Research capabilities that supplement the decision-making process
- Technological resources necessary for efficiently supervising institutional investments
- Investment expertise that provides guidance to those responsible for managing the investment process
- Educational resources necessary for well-informed investment decisions
THROUGH A CONSISTENT application of our consulting process, Wurts & Associates has been enhancing our client’s effectiveness since the firm’s founding in 1986.

This process enables our consultants to properly understand the unique issues that confront each client, design an intelligent strategy that matches their requirements, prudently implement the decisions, and effectively evaluate the status of their investment program on an on-going basis.

Thoroughly understanding the existing condition of the new client’s investment program is essential to a productive consulting relationship. This involves an appraisal of not only the existing manager structure, but also a review of the rationale behind previous investment decisions. Wurts & Associates’ professionals work to understand the funding requirements of the assets, the risk tolerances and risk management procedures of the client, and the ways in which the investment program fits into the strategic mission of the organization.

Our professionals then work to understand each component that comprises the investment portfolio, quantitatively assessing investment manager skill and evaluating their organizations from a qualitative perspective. The final component of our assessment is to determine if the existing manager structure is in step with the objectives of the client.
In the Design stage of the consulting process, we introduce appropriate strategic solutions consistent with the client’s objectives to improve the existing investment program. This is where the practical application of modern portfolio theory, consultant experience, and proven best practices in fund management are introduced to the client with the objective of strengthening the fund portfolio.

Wurts & Associates then performs an asset allocation study that includes the modeling of the relevant liabilities. This helps our clients understand the diversification benefits of asset classes not currently utilized, assess the likelihood that alternative investment strategies will satisfy the funding requirements and optimally allocate investments along the efficient frontier.

Another important issue that is considered at this stage is the use of passive management. Our professionals are trained to educate our clients about the latest thinking regarding risk budgeting. That is, where does it pay to take active risks within a portfolio and in what proportion does it make sense, given the client’s requirement for alpha.

It is also important to consider the appropriateness of the various investment vehicles available to the client.

The use of separate accounts, commingled funds and mutual funds must be appropriately applied to each situation depending upon size, asset class, tax considerations and diversification requirements.

Expense management techniques are also typically proposed to the client during this phase of the consulting process. Depending upon the size of the portfolio, securities lending, commission recapture and incentive fee arrangements may make sense to mitigate the inevitable costs associated with an active investment management program.

Finally, we evaluate the appropriateness of the existing policy statement with special consideration given to the risk management language contained within the document. Our expertise in this area can further protect the client from unwanted risks in the investment process.
IMPLEMENT

The Implementation stage is vitally important to the successful execution of prudent fund management. At this stage, the consultant works with the client to implement the decisions made during the design phase of the consulting process. Our resources in manager research are brought to bear to identify skilled investment managers that fit the requirements of the client. We also utilize our experience in identifying other appropriate vendors, such as corporate co-trustees, commission recapture brokers, transition managers and others.

Of course, successful implementation does not end with the selection of an investment manager. We use our buying power within the market to negotiate favorable fee arrangements and appropriate contract language. We work with the new manager and the custodian to minimize any transition costs associated with changes in investment managers. Finally, our professionals appropriately amend the manager guidelines to reflect the changed nature of the portfolio.

EVALUATE

The Evaluation phase is an on-going process in which Wurts & Associates reviews the market environment, analyzes the portfolio and assesses the various risks within the fund. Our firm’s research and educational resources are also made available to the client in our continuing effort to increase the awareness of critical fund management issues.

Wurts & Associates’ proprietary portfolio evaluation system is linked to a daily reconciliation platform with leading custodial banks. This enables our professionals and clients to have the most timely and accurate information possible.

The Evaluation stage naturally leads back to the Assessment phase of the consulting process. At Wurts & Associates, we believe that successful fund sponsors are continuously seeking improvement against the backdrop of changing circumstances. Therefore, it is critically important that the consultant be prepared to appropriately revisit previous investment decisions.
EVERY MAJOR ENDEAVOR requires a plan. Whether introducing a new product into the marketplace, seeking an increase in charitable donations or constructing an office building, a well-designed plan is crucial to the achievement of one’s goals. Successful investing is no exception.

Establishing an effective investment perspective on the capital markets requires an understanding of the relationship between risk and return, and the ability to translate risk tolerances into meaningful investment guidelines.

Using these skills, our research and analytical capabilities and our experience, we create an investment policy designed to enhance investment performance and achieve investment manager accountability.

A well-constructed investment policy should:

- Establish meaningful risk/return objectives for the fund
- Clearly specify decision-making responsibilities
- Improve investment performance by specifying asset allocation targets and portfolio rebalancing procedures
- Achieve investment manager accountability by providing clearly defined performance objectives and investment guidelines
- Protect the fund sponsor from inappropriate investments
- Satisfy applicable fiduciary requirements

William Wurts and Victor Lee
WURTS & ASSOCIATES believes that a long-term strategic plan is the foundation of our relationship with the client. Therefore, we work closely with the client to gain an understanding of the return objectives and risk tolerance of the plan.

The development of a successful investment strategy begins with clearly defining an objective for the fund’s assets. Our consultants work with each client to identify its strategic objectives – which can range from minimizing the likelihood of ever making a contribution for a corporate pension fund to building a fund of assets for a foundation’s future philanthropic endeavors – and to determine the appropriate trade-off of risk and return to meet these objectives.

By working closely with the client at this stage, we are able to gain insight into the culture of the sponsor organization, which we have found is as important as an understanding of the numbers themselves. We believe that this distinguishes us from firms which take a more cookie-cutter approach to consulting.

After gaining an understanding of the strategic objectives and the risk tolerances of the client, Wurts & Associates’ consultants examine the existing and future obligations of the fund assets. For defined benefit plans, an analysis of the liabilities is performed through the use of sophisticated modeling software developed by actuaries. For endowments and foundations, this means incorporating the spending policy and any special cash flow requirements into the analysis, while tax considerations, estate planning and liquidity requirements must be considered for taxable clients.

Semi-annually our senior professionals review and, if necessary, modify our proprietary set of capital market assumptions for each asset class. Using both historical data and input from leading research institutions, investment managers and academics, we establish a stable set of long-term capital market assumptions to guide our modeling process.
The existing allocation is then analyzed using these assumptions to identify the minimum risk portfolio that will satisfy the return objectives of the fund. Depending on the needs of the client, Wurts & Associates uses mean/variance optimization, surplus optimization and downside risk analysis to help us arrive at an optimal asset allocation solution. Throughout the process, we focus on quantifying not just the expected case, but also the downside risk in terms meaningful to the fund sponsor.

**Sensitivity Analysis**

It is important to test the sensitivity of changes to key assumptions for optimal portfolios. Using Monte Carlo simulation, economic testing and alternative fund specific variables – such as plan demographics, philanthropic needs or cash flow requirements – Wurts & Associates forecasts and assesses the likelihood of various uncertainties. These “what if” analyses help the client determine if the uncertainty surrounding a mix accurately addresses its overall risk tolerance.

**Proper asset allocation lets the fund sponsor:**

- Maximize investment performance within specific risk constraints
- Evaluate projected funding requirements against various asset mixes
- Quantify risk and return potential of various asset classes
- Optimally diversify assets among different investment styles
- Plan future contribution requirements

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**Greater Return, Less Risk**

![Graph showing return versus standard deviation](image_url)

**Asset Allocation by segment**

<table>
<thead>
<tr>
<th>Asset Class</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>1.4%</td>
</tr>
<tr>
<td>Real Estate</td>
<td>5.0%</td>
</tr>
<tr>
<td>Int'l Equity</td>
<td>12.0%</td>
</tr>
<tr>
<td>Int'l Bonds</td>
<td>5.6%</td>
</tr>
<tr>
<td>Domestic Equity</td>
<td>34.5%</td>
</tr>
<tr>
<td>Fixed Income</td>
<td>30.0%</td>
</tr>
</tbody>
</table>
At Wurts & Associates, our manager research has only one objective – to find the investment managers that best meet our clients’ needs. Too often, manager selection is based solely on past performance, incomplete information, the best presentation skills or the lowest fees.

We believe the return data are important, and make extensive use of return, style and attribution analyses. However, this data is only a starting point at Wurts & Associates.

Our professionals focus our resources on understanding three key factors:

1. We thoroughly analyze a manager’s investment philosophy and process to ensure that it is logical and replicable.

2. We assess the manager’s organization: its ownership structure, compensation structure and future plans. We look beyond the firm level to focus on the team that has built the record to gauge the likelihood that it will stay in place. In our experience, no quantitative screen can replace the judgment and knowledge of our research team in assessing these factors.

3. We take a risk-budgeting approach to determine how potential managers will fit into the existing portfolio structure.
A comprehensive evaluation of these firms is compiled into a search report that we present to the client. We then assist clients with the interviewing process and in making the final selection.

We also work closely with our clients in drafting investment guidelines, reviewing the contract and negotiating fees, including performance fees, where appropriate.

Our focus on proper manager selection allows our clients to:

- Find those managers whose investment philosophy, process and characteristics best match the needs of the fund, thereby reducing the risk of unpleasant future surprises
- Be well-informed about the organization and personnel of the firm managing the organization’s assets
- Have a good understanding of the role of each of their managers, allowing them to weather the inevitable periods of underperformance with confidence

Wurts & Associates provides an independent perspective, investment expertise, qualitative research and statistical data that help the fund sponsor hire investment managers with a superior organization and an investment style consistent with the existing portfolio.
Evaluating investment performance is an important part of fulfilling fiduciary responsibilities. By knowing where they stand, our clients can make sound decisions. Our professionals assemble timely, pertinent information that enables our clients to assess the investment performance of their organization’s institutional investments.

We use the Independent Consultants Cooperative Universe of tax-exempt funds for comparing investment performance. The universe is nationally recognized as one of the largest performance databases in the consulting industry. Its flexibility—coupled with our proprietary reporting capability—allows us to customize analyses to our clients specific requirements.

The system evaluates each manager against the most appropriate passive benchmarks and style universe and measures returns on a risk-adjusted basis, utilizing quantitative measurement tools such as tracking error, standard deviation, alpha, information ratio, beta and Sharpe ratio. It also provides attribution capabilities that will help determine the sources of return for each portfolio.

Wurts & Associates goes beyond measuring returns and reporting portfolio statistics. We help our clients assess the forces behind performance so they can make better financial decisions.

**Qualitative Assessment**

The portfolio evaluation process should also contain a qualitative assessment of the investment managers employed. Our professionals help examine the continuity in philosophy and process, stability of key personnel and effects of organizational changes. Often, future performance shortfalls can be avoided by identifying...
significant negative changes in these areas. Our size ensures that firms undergoing these types of changes inform Wurts & Associates, allowing us to make appropriate and timely recommendations to our clients.

Thorough performance measurement allows our clients to:

- Have independently computed investment results and risk assessments
- Know how their portfolios have performed compared to passive benchmarks and to other similarly managed portfolios
- Make informed decisions about investment policy, asset allocation, and investment manager selection
- Compare their funds’ asset allocation to its strategic targets allowing more timely rebalancing decisions
- Satisfy fiduciary requirements for investment manager monitoring

Wurts & Associates goes beyond measuring returns and reporting portfolio statistics. We assess the forces behind performance so our clients can make better financial decisions.
Wurts & Associates believes that one of our most fundamental duties to our clients is to ensure that they have all of the information possible to make informed investment decisions.

To accomplish this goal, Wurts & Associates is constantly conducting research on a wide range of topics from historical and expected asset class returns, risks, and correlations to the strategies and performance of hedge funds. To communicate this information, we conduct educational presentations and publish papers on topics of interest on our website, which is easily accessible to our clients.

We inform our clients on a regular basis of new developments in portfolio theory and of the ever-changing menu of options available to them in selecting their investments. We also research topics specifically requested by a client and make an educational presentation to the client to communicate our findings.
WE BELIEVE that any firm entrusted with financial decisions must maintain the highest ethical standards.

At Wurts & Associates, we have adopted a Code of Ethics and Standards of Professional Conduct drawn from The Code of Ethics and Standards of Professional Conduct published by the Association for Investment Management and Research (AIMR).

It addresses our responsibilities to the fidelity of the investment process; our interaction with clients and potential clients; our professionals’ obligation to their employer; and our obligation to the public, plan fiduciaries and plan participants. The complete text of our Code of Ethics may be viewed on our website at www.wurts.com.

Principals and employees of Wurts & Associates shall:

- Act with integrity, competence, dignity, and in an ethical manner when dealing with the public, clients, prospects and colleagues.
- Practice and encourage others to practice in a professional and ethical manner that will reflect credit on themselves, the firm and their profession.
- Strive to maintain and improve their competence and the competence of others in the firm.
- Use reasonable care and exercise independent professional judgment.

To be truly effective, investment advice should be independent, unbiased and solely based upon the unique needs of each client.
Our professionals have been helping clients make important financial decisions for almost two decades by providing them with custom solutions to their unique requirements.

We look forward to the possibility of helping your organization make critical investment decisions that will lead to successful fund management for many years to come.
FIRM OVERVIEW

After 25 years of institutional consulting experience, William Wurts founded Wurts Johnson & Company in 1986. Four years later, the Los Angeles office was established to serve our California clientele. Today, after 17 years in business, we are one of the most established independent institutional consulting firms in the country. Our clients, whose assets total over $27 billion, include educational and charitable organizations, corporate and public retirement funds, health care, insurance companies, Taft-Hartley trusts, and substantial net worth families.

Wurts & Associates is in the business of providing value-added expertise that enables institutional investors to prudently discharge their fiduciary responsibility. Our mission is to provide independent, objective advice that will help our clients gain the most value from their professionally managed assets. By combining seasoned investment professionals and cutting edge technology, Wurts & Associates strives to provide the finest proactive consulting services.

Wurts & Associates provides the following services:

- Asset / Liability Modeling
- Investment Policy
- Performance Evaluation & Analysis
- Investment Manager Selection
- Portfolio Structuring
- Custodial Searches
- Transition Management Supervision
- Trading Analysis
- Trustee & Staff Education
- Custodial Services Analysis

EXPERIENCED CONSULTANTS

Wurts & Associates is pleased to provide a consulting team of Jeffrey MacLean, President and Chief Operating Officer and Scott Garrett, Consultant, both from the Los Angeles office. We assign two consultants to each client as we believe this provides superior service and greater accessibility for our clients. Jeff is a substantial owner of Wurts & Associates. He has serviced public pension funds for 11 years. Scott has serviced public pension funds for 4 years. Attached are the complete biographies for Jeff and Scott, as well as for other members of our firm.
CONSULTING PROCESS

Through a consistent application of our consulting process, Wurts & Associates has been enhancing our clients effectiveness since the firm’s inception in 1986. This process enables our consultants to properly understand the unique issues that confront each client, design an intelligent strategy that matches their requirements, prudently implement the decisions, and effectively evaluate on an ongoing basis the status of their investment program.

ASSESS

Thoroughly understanding the existing condition of the new client’s investment program is essential to a productive consulting relationship. This involves an appraisal of not only the existing manager structure, but also a review of the rationale behind previous investment decisions. Wurts & Associates’ professionals work to understand the funding requirements of the assets, the risk tolerances of the client, and how the investment program fits into the strategic mission of the organization.

Our professionals then work to understand each component that comprise the investment portfolio, quantitatively assessing investment manager skill, and evaluating their organizations from a qualitative perspective. The final component of the assessment of our consulting process is determining if the overall objectives of the client are in line with the existing manager structure.

DESIGN

The design stage of the process is where our professionals introduce appropriate strategic solutions, consistent with the client objectives, to improve upon the existing investment program. This is where the practical application of modern portfolio theory, consultant know how, and proven best practices in fund management are introduced to the client.

Our professionals will evaluate the appropriateness of the existing investment policy with special consideration given to the risk management language contained within the document. Oftentimes, our expertise within this area can insulate the client from the investment process.
Wurts & Associates will perform an asset allocation study that will include the modeling of the relevant liabilities. This will help our clients understand the diversification benefits of asset classes not currently utilized, assess the likelihood that alternative investment strategies will satisfy the funding requirements, and optimally allocate investments along the efficient frontier.

Another important issue that is considered is the application of passive management. Our professionals are trained to educate our clients about the latest thinking regarding risk budgeting. That is, where does it pay to take active risks within a portfolio and in what proportion does it make sense given the client’s requirement for alpha? It is also important to consider the appropriateness of the various investment vehicles available to the client. The use of separate accounts, commingled funds, and mutual funds must be appropriately applied to each situation depending upon size, asset class, tax considerations, and diversification requirements.

Expense management techniques are also typically exposed to the client during this phase of the consulting process. Depending upon the size of the portfolio, securities lending, commission recapture, and incentive fee arrangements may make sense to mitigate the inevitable costs associated with an active investment management program.

**IMPLEMENT**

This stage is vitally important to the successful execution of prudent fund management. It is here where the consultant works with the client to implement the decisions made during the design phase of the consulting process. Wurts & Associates’ resources in manager research are brought to bear to identify skilled investment managers that fit the requirements of the client. We also utilize our experience in identifying other appropriate vendors such as corporate co-trustees, commission recapture brokers, transition managers, and defined contribution administrative firms.

Successful implementation doesn’t end with the selection of an investment manager. Wurts & Associates’ professionals are trained to utilize our buying power within the market to negotiate favorable fee arrangements and appropriate contract language. We work with the new manager and the custodian to minimize transition costs.
The investment policy statement is a living document that requires regular review to ensure that it appropriately embodies an investment strategy that remains relevant given the

- associated with the change in investment managers. Finally, our professionals will appropriately amend the investment guidelines to reflect the revised nature of the portfolio.

EVALUATE

The evaluation stage is an ongoing process where Wurts & Associates reviews the market environment, analyzes the portfolio, and assesses the various risks within the fund. Our firm’s research and educational resources are also made available to the client in our continuing effort to increase the awareness of critical fund management issues.

Wurts & Associates utilizes our proprietary portfolio evaluation system that is linked to a daily reconciliation platform with leading custodial banks. This enables our professionals and clients to have the most timely and accurate information possible at their disposal.

The final step eventually leads back to the assessment phase of the consulting process. At Wurts & Associates, we believe that successful fund sponsors are continually seeking improvement against the backdrop of changing circumstances. Therefore, it is critically important that our professionals are prepared to appropriately revisit previous investment decisions.

INVESTMENT POLICY

Wurts & Associates has been developing investment policy and portfolio strategies for over seventeen years. We work to develop an investment policy which is designed to enhance investment performance and achieve investment manager accountability.

Wurts & Associates believes that an investment policy should go beyond articulating just the performance goals, manager guidelines and operational procedures; it should enhance investment performance by providing a clearly defined strategic direction for assets. A well-conceived investment policy should establish meaningful risk & return objectives for the fund, clearly state decision-making responsibilities, improve investment performance by specifying asset allocation and portfolio rebalancing targets and ranges, achieve investment manager accountability by providing clearly defined performance objectives and investment guidelines, protect the fund sponsor from inappropriate investments, and satisfy applicable
fiduciary requirements. The investment policy is then periodically monitored and reviewed to ensure that managers are adhering to the guidelines.

**ASSET ALLOCATION**

In conducting an asset allocation study for a client, we start with the belief that a long-term strategic investment plan is the foundation of our relationship with that client. We will work closely with the Investment Committee to gain an understanding of the return objectives and risk tolerance of the fund. By working closely with the committee at this stage we are able to gain insight into the culture of the sponsor organization, which we have found is at least as important as an understanding of the numbers themselves, and helps distinguish us from firms which take a more cookie-cutter approach to consulting.

Once we have gained some understanding of the strategic objectives and the risk tolerance of the fund, we model the portfolio using an internally developed model. Our Returns Assumption Committee meets semi-annually to develop long-range risk, return, and covariance assumptions for equities, fixed income, alternatives, and cash, using both historical data and input from leading Wall Street firms, investment managers, academics, and economists. These numbers are used as a starting point in our modeling process, we then spend a great deal of time testing the sensitivity of various outcomes against the given inputs.

Broadly speaking, we use both mean/variance and surplus optimization to arrive at a range of asset allocation mixes. We then use Monte Carlo simulation to allow us to determine the possible effects of different asset allocations on spending and growth in the future (usually each of the next 10 years). Finally, we test the results in two different ways. First, we stress test ("worst case" scenario analysis) to see how the fund would have performed in either a hypothetical or historical bear market (e.g., the 1973-74 bear market). We have found that describing a fund’s downside risk in these concrete terms provides a very useful sense of the risk being incurred. Second, we analyze the sensitivity of the results to the risk and return assumptions which have gone into the asset allocation. If, for example, we have assumed a long-term return of 8.5% for equities, what is the effect on spending if we assume 6.5%?

We believe two forces are responsible for amending an existing allocation: changing expected returns and changing liabilities. Expected returns will change because interest rates and other factors driving our forecasts are dynamic. This is currently the case with many of our clients altering their allocations due to lower expected returns from traditional and
alternative assets. Changing liabilities are client specific and can be the result of a decision to spend or to increase a payout to a more competitive rate versus comparable institutions. Depending on our clients’ needs, we utilize Winklevoss Technologies’ ProVal actuarial software to assist us in modeling pension plan liabilities and for surplus optimization modeling. We also use Ibbotson software both for its historical data and for mean/variance optimization modeling. This software enables us to utilize the efficient frontier to assure the Board is maximizing their portfolio’s return for each unit of risk assumed.

MANAGER RESEARCH

Wurts & Associates maintains a fully dedicated Manager Research Group of four full-time professionals: Shelly Heier, CFA, John Wasnuck, Wade Millen, and Brent Nelson, whose primary objective is screening investment managers for our clients. Further, our consultants are involved in each step of the selection process, ensuring that each client’s unique requirements are well represented from beginning to end.

Our Manager Research Group is committed to finding the investment manager that will best meet the needs of each client. After a thorough analysis of a manager’s return history, style, and performance attribution, we focus on understanding three key factors through proprietary research:

- First, we analyze a manager’s investment philosophy and process to ensure that it is logical and replicable.
- Second, we examine the manager’s organization: its ownership structure, its compensation structure, and its future plans. We look beyond the firm level to focus on the team that has built the record, to gauge the likelihood that it will stay in place.
- Third, we take a risk-budgeting approach to determine how potential managers will fit into the existing portfolio structure.

It is our belief that no quantitative screen can replace the judgment and experience of our research team in assessing these factors. It is a combination of prudent objectivity and experienced-based subjectivity that provides successful results in a manager search.
PORTFOLIO EVALUATION

Evaluating investment performance is an important part of fiduciary responsibility. It is only by knowing where you stand that you can make sound decisions for the future. Our professionals assemble timely, pertinent information that enables an investment committee to assess the performance of their organization's institutional investments.

We use Independent Consultants Cooperative Universe of tax-exempt funds for comparing investment performance. The universe is nationally recognized as one of the largest databases in the consulting industry. Its flexibility, coupled with our proprietary reporting capability, allows us to customize analyses to our clients' specific requirements. In fact, the quarterly performance report has over 130 different sets of analysis available to each client. Monthly updates are also available to the majority of our clients.

The system evaluates each manager against the most appropriate passive benchmarks and style universe and measures returns on a risk-adjusted basis, utilizing quantitative measurement tools such as tracking error, standard deviation, alpha, information ratio, beta, Treynor ratio and Sharpe ratio. It contains attribution capabilities that will evaluate the source of return for each portfolio. A sample performance report is available upon request.

Wurts & Associates goes beyond measuring returns and reporting portfolio statistics. We help you assess the forces behind performance so you can make better financial decisions.

RESEARCH AND EDUCATION

Wurts & Associates believes that one of our most fundamental duties to our clients is to ensure that they have all of the information necessary to make informed investment decisions. To accomplish this goal, Wurts & Associates is constantly conducting research on a wide range of topics from historical and expected asset class returns, risks, and correlations to the strategies and performance of hedge funds.

To communicate this information with our clients we conduct educational presentations and publish papers on topics of interest on our website. We strive to introduce new topics to our clients on a regular basis so that they may be informed of new developments in portfolio theory and the ever changing menu of options available to them in managing their investments. Often we will do research on topics specifically requested by a client and make specialized presentations to communicate our findings.
BIографICAL INFORMATION

MR. WILLIAM W. WURTS

Mr. Wurts, Chief Executive Officer and Founder of Wurts & Associates, has been in the investment consulting business for 40 years. Prior to establishing Wurts & Associates he worked for 23 years as a vice president in the institutional division of Merrill Lynch. In this capacity, Mr. Wurts and his team had the responsibility of providing ongoing consulting to over 50 major clients in the Pacific Northwest. He established Wurts & Associates in Seattle in January 1986 and the Los Angeles office in 1990.

Mr. Wurts has spoken at numerous meetings of the Western Pension Conference and the International Foundation of Health, Welfare & Pension Plans on a wide range of subjects relating to institutional investing. Over the years he has also taught a number of investment courses through the Seattle community college system. Mr. Wurts is a current member of the Western Pension Conference, and has served as its president. He is also a member of the International Foundation of Health, Welfare & Pension Plans, the Rotary Club of Seattle, and the Rainier Club. Mr. Wurts received his BA from Yale University.

MR. JEFFREY J. MACLEAN

Mr. MacLean, President and Chief Operating Officer, is a shareholder of Wurts & Associates. In addition to his management duties he services key client relationships, providing strategic investment advice to institutional clients associated with our Los Angeles office. Prior to joining our firm in 1992, Mr. MacLean was a consultant for Arthur Andersen & Company. Before his experience with Arthur Andersen, he served as Vice President for Shurgard Realty Group and was responsible for raising real estate development assets.

Mr. MacLean serves as a Trustee for the Little Company of Mary Health Foundation. He is a keynote speaker in various investment forums; engagements include presentations on Alternative Investment Strategies at the International Foundation of Employee Benefit Plan, Adding Value as an Investment Consultant at the Plan Sponsor Forum on Investment Consulting, Emerging Markets at the Endowment and Foundation Summit on Investment Management and Plan Stewardship, Bingo or Chess at the Global Investment Summit. Mr. MacLean graduated with a BA in Business from the University of Washington and an MBA from the University of Virginia Darden School of Business.
BIографICAL INFORMATION

MR. RICHARD C. WYMAN, CPA

Mr. Wyman, Senior Vice President and Chief Financial Officer, is a CPA and has been with Wurts & Associates Inc. since its inception in 1986. Mr. Wyman primarily spends his time consulting to existing clients, which include self-directed retirement plans, defined benefit retirement plans and endowment funds. Prior to his full-time involvement as a Consultant, Mr. Wyman was responsible for all the mutual fund and separate manager search activity for the firm and pioneered the current manager search process used by our search team. He has personally conducted over 150 investment manager and mutual fund searches on behalf of our clients and conducts approximately 50 manager interviews per year. Mr. Wyman is a graduate of Ohio Wesleyan University with a BA degree in mathematics.

MR. TIM C. RUTLEDGE

Mr. Rutledge, Senior Consultant, spent 11 years with Segal Advisors prior to joining Wurts & Associates in 2000. In addition to investment performance analysis, Mr. Rutledge performs special studies on asset allocation, securities lending, and custodian bank reviews. He is also responsible for interviewing alternative asset investment managers for the Seattle office. He has prior experience in real estate, venture capital, and as a Pension Plan Trustee.

Mr. Rutledge is a member of the Association for Investment Manager Research (AIMR) and an affiliate member of the Seattle Society of Financial Analysts. Mr. Rutledge received a BS in Industrial Business and an MBA from Boise State University.

MR. JOHN M. WEST, CFA

Mr. West, Senior Consultant, is the firm's practice leader in foundation and endowment services. He currently works with 13 clients representing community foundations, endowments, religious institutions, and hospitals with combined assets of approximately $2 billion. Mr. West also oversees the company's research efforts in capital markets, asset classes and spending policies as Chairman of the Research Advisory Committee. Previously, he was a performance analyst in the Seattle office where he conducted performance audits of institutional fixed income, equity, real estate and cash portfolios and monitored investment manager compliance with investment policy statements and portfolio guidelines.

Mr. West graduated from the University of Arizona with a BS degree in Finance. He earned the Chartered Financial Analyst designation and is a member of the Los Angeles Society of Financial Analysts.
Biographical Information

Mr. Scott N. Garrett
Mr. Garrett, Consultant, assists in client servicing and new business development from the Los Angeles office. Previously he served as a performance analyst in the Seattle office providing quantitative analysis of client portfolios designed to assist our clients in evaluating strategic investment decisions. Mr. Garrett graduated from the University of Arizona with BS degree in Political Science. He is currently a candidate for the level two exam of the Chartered Financial Analyst (CFA) designation program.

Mr. Scott J. Whalen
Mr. Whalen, Consultant, is responsible for providing exceptional client service across all our service lines. He comes to us from a distinguished career in management consulting, where he helped private industries, as well as the public sector, improve efficiency and operational performance. Mr. Whalen gained business insight at firms such as McKinsey & Company, Ernst & Young, and Answerthink Consulting Group. This broad experience gives him a unique and valuable perspective in his evaluation of manager processes and methodologies. Mr. Whalen received a Bachelor of Arts degree in Economics from Wake Forest University and a Masters in Business Administration from the University of Southern California.

Ms. Kerry L. Ward
Ms. Ward, Consultant, is primarily responsible for providing client servicing to a variety of clients, including charitable organizations, corporate retirement plans, and healthcare organizations. Ms. Ward was a Senior Consulting Associate at Cambridge Associates where she worked with over 20 foundations, endowments, and private family groups. Most recently, she has gained e-commerce and strategic marketing experience in the technology and entertainment sectors. Ms. Ward graduated magna cum laude from Colby College with a BA in Economics and received an MBA from Harvard University.
MR. VICTOR L. LEE
Mr. Lee joined Wurts & Associates in 1990 and presently serves as a Consultant, providing a full range of client services. Formerly, as the Director of Manager Search, he was responsible for developing and overseeing the firm's investment manager research team who evaluate investment management organizations worldwide. Mr. Lee continues to serve as a senior advisor to the Manager Research Group. He began his career with Wurts & Associates as the Senior Operations Analyst whose primary function was to oversee the firm's proprietary performance evaluation service.

Before joining Wurts & Associates, Mr. Lee was with Seafirst Bank, the Northwest subsidiary of BankAmerica Corporation, for five years. He holds a Bachelor's degree in finance from Seattle University.

MR. JOHN WASNOCK
Mr. Wasnock, Associate, joined Wurts & Associates Inc. in 1997. Mr. Wasnock is a member of the Investment Manager Research Group. Previously at Wurts & Associates, he served as a performance analyst providing quantitative analysis of client portfolios. Mr. Wasnock graduated with a B.A. in finance from the University of Washington. He is currently a candidate for the level two exam of the Chartered Financial Analyst (CFA) designation program.

MS. SHELLY HEIER, CFA
Ms. Heier, Director of Manager Research, joined Wurts & Associates in 2000. She is responsible for investment manager research and is involved in additional research activities for the firm. Prior to joining Wurts & Associates, she worked as an analyst for a financial planning firm specializing in high net worth individuals.

Ms. Heier graduated from the University of Puget Sound with a BA degree in Business and Public Administration with an emphasis in Finance. She received the Chartered Financial Analyst (CFA) designation in 2001. Ms. Heier is a member of the Association for Investment Management and Research, the Seattle Society of Financial Analysts, and the Western Pension Benefits Conference.
**Biographical Information**

**Mr. Harold P. Wu**
Mr. Wu, Senior Analyst, joined the firm in September of 1991. His primary responsibility is overseeing of the firm’s performance analysis operations, which include data processing, analysis, and the production of client reports. Mr. Wu graduated with a B.A. in business finance from Seattle University.

**Mr. Joel Wetrosky**
Mr. Wetrosky, Senior Analyst, joined Wurts & Associates in 1999. His current duties include investment compliance monitoring and data auditing for our proprietary performance system. He manages the firm’s Advent program. Mr. Wetrosky received a B.A. in Economics from U.C. Berkeley.

**Mr. John Lee**
Mr. Lee, Senior Analyst, performs investment research and assists in client servicing from the Los Angeles office. Prior to joining Wurts & Associates, Mr. Lee worked for the alternative strategies division of Wilshire Associates where he was a part of a team responsible for long/short strategy serving institutional and high net worth clients. Mr. Lee holds a Bachelor’s degree in Economics from University of California, Los Angeles.

**Ms. Magdalia Serna**
Ms. Serna works in the endowments and foundation services practice and is involved in the company’s quantitative research effort. Prior to joining Wurts & Associates, Ms. Serna was an Associate with Wilshire Associates where she worked in their Analytics group testing Wilshire’s equity and fixed income analytic systems. Ms. Serna holds a Master’s degree in Financial Mathematics from the University of Chicago and Bachelor’s degree in Mathematics from the University of California, Riverside. She is a Level II Candidate for the Chartered Financial Analyst (CFA) designation.