



HIGHEST AND BEST USE ANALYSES AND LAND VALUE OPTIMIZATION STUDIES

Overview of HBU and Land Value Optimization Services

Land owners often face decisions about how best to exploit the value of their property. Delta Associates assists clients in developing strategies to realize the highest potential from land assets — a process called land value optimization. In this discipline — traditionally referred to as “highest and best use analysis” — four analytical tests are key to a decision:

- *Legally permissible*: What are the legal uses allowed for the property? What uses are likely to be allowed, even if not permitted under current zoning laws? In this facet of the analysis, Delta Associates often works with legal counsel to determine strategy.
- *Physically possible*: The site’s physical constraints are evaluated to determine uses that are suitable. Advisors from the physical sciences, such as civil and environmental engineers, are consulted.
- *Financially feasible*: For a given use that meets the first two tests, development costs are estimated and compared against a market-based income and expense pro forma to determine if an acceptable return can be generated from *each* use.
- *Optimally productive*: Finally, alternative uses and *combinations of uses* are compared to determine the use or uses that generate the optimal return. Essential to this analysis is an estimate of the likely present value to the land owner of probable future transactions and other cash flows. A common mistake in financial analysis is to build a static proforma or an idealized cash flow forecast without a realistic assessment of the viewpoint of the likely development partner and an estimate of when a transaction will be consummated. This latter step is *Land Value Optimization* and is often set in the context of a computerized model of development economics.

In addition to issues of land use, the firm often is called on to evaluate the risk profile and return potential from a variety of implementation formats:

- Sale or ground-lease of the entire parcel to a developer
- Sale or ground-lease of the parcel, with retention of upside potential based on project performance
- Joint Venture of the development with an experienced development firm
- Development of the parcel by retention of a Fee Developer
- Development of the parcel by staffing up and taking on debt

Illustrative Assignments

George Washington University Washington, DC

GWU engaged Delta Associates to prepare an HBU/Land Value Optimization Study for the re-use of its old hospital site on Washington Circle — a mixed-use project that could contain up to one million square feet of office, apartments, student dorms, hotel, retail, and conference facilities. Delta worked with the University’s master plan consultant and zoning counsel to develop multiple scenarios of various combinations of uses, in order to determine the optimal return within the University’s mission, local political constraints, neighborhood concerns, and market feasibility.

Potomac Yard Arlington and Alexandria, Virginia

Since 1992, Delta Associates has assisted the current and previous owners of this 350-acre planned mixed-use development south of National Airport. The firm’s services over the course of this relationship have included market analyses, development programming scenarios, land pricing studies, fiscal and economic impact analyses, transit and infrastructure impact studies, and cash flow and absorption forecasts. Central to this set of on-going studies has been the early HBU/Land Value Optimization Study that assisted the owner in planning the land uses at the site. Uses studied and optimized include: office, hotel, retail, industrial, and housing of a variety of sorts.

Illustrative Assignments (Cont'd)

Martens Volvo Property Washington, DC

An auto dealership in a desirable neighborhood undergoing residential and commercial re-development engaged Delta Associates to evaluate developer proposals and prepare financial analyses to evaluate the optimal implementation approach. The objectives: Maximize value while minimizing risk within the context of a variety of development scenarios. Delta Associates developed strategies for maximizing the ownership's objectives for a combination of long-term control and appreciation together with some short-term liquidity. The firm assisted with negotiations with the preferred development partner and prepared alternative financial models as negotiations progressed.

First Baptist Church Washington, DC

This church is located in Northwest Washington in a neighborhood experiencing strong development pressure. The church desired an analysis of the optimal use of its parking lot, and Delta Associates prepared a comparative analysis of apartment and office development — the two uses for which there is demonstrable demand and likely to be permitted under the site's zoning. In addition to cash flow analyses showing the church's relative returns under each scenario, the firm also prepared an assessment of the pros and cons of each compared to the church's stated objectives.

Tax Analysts Arlington, Virginia

A not-for-profit research organization controlling a mixed-use site sought Delta Associates assistance with a land value optimization analysis that also required a study of implementation format. Key components to this study: The client's need for headquarters space, acquisition of remaining out-parcels on the subject site, optimization of potential uses (office and apartments), and evaluation of different development/implementation formats. The firm prepared financial models to evaluate the mix of uses, timing of development opportunities, development/implementation formats, and evaluation of the most desirable to potential development partners. Other issues considered in the analysis included a potential sale-leaseback transaction, and the need for local government assistance (through zoning exceptions and economic development incentives).

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