

Portland State University

**PDXScholar**

---

Engineering and Technology Management  
Student Projects

Engineering and Technology Management

---

Fall 2003

# Use of Hierarchical Decision Modeling for Site Selection of a Major League Baseball Stadium in Portland

Priya Ajgaonkar  
*Portland State University*

Aroonrat Auysakul  
*Portland State University*

Edward Cespedes  
*Portland State University*

Ryan Jefferis  
*Portland State University*

Seiji Shinriki  
*Portland State University*

Follow this and additional works at: [https://pdxscholar.library.pdx.edu/etm\\_studentprojects](https://pdxscholar.library.pdx.edu/etm_studentprojects)



Part of the [Operations Research, Systems Engineering and Industrial Engineering Commons](#)

**Let us know how access to this document benefits you.**

---

## Citation Details

Ajgaonkar, Priya; Auysakul, Aroonrat; Cespedes, Edward; Jefferis, Ryan; and Shinriki, Seiji, "Use of Hierarchical Decision Modeling for Site Selection of a Major League Baseball Stadium in Portland" (2003). *Engineering and Technology Management Student Projects*. 1503.  
[https://pdxscholar.library.pdx.edu/etm\\_studentprojects/1503](https://pdxscholar.library.pdx.edu/etm_studentprojects/1503)

This Project is brought to you for free and open access. It has been accepted for inclusion in Engineering and Technology Management Student Projects by an authorized administrator of PDXScholar. Please contact us if we can make this document more accessible: [pdxscholar@pdx.edu](mailto:pdxscholar@pdx.edu).



Title: Use of Hierarchical Decision Modeling for Site Selection of a Major League Baseball Stadium in Portland

Course: EMGT 530/630

Year: 2003 Winter

Author(s): P. Ajgaonkar, A. Auysakul, E. Cespedes, R. Jefferis and S. Shinriki

Report No: P 03073

ETM OFFICE USE ONLY

Report No.: See Above

Type: Student Project

Note: This project is in the filing cabinet in the ETM department office.

**Abstract:** This paper proposes a hierarchical decision model to select a site from various potential sites for a major league baseball stadium in Portland, Oregon. A short background on MLB in Portland, with all the related factors, is provided. Next this paper describes Hierarchical Decision Modeling using pair wise comparisons and the process of using this as a decision making tool. A detailed description of the HDM developed is then provided. This model includes determination of the number of levels of the HDM and their relationship with each other. It describes all the elements of each level and the process of identifying and specifying them. The pair wise comparison method used to gather the experts' judgments is then described. Next it describes the analysis of the gathered data from which final priority weights are obtained for the various sites under consideration. The site selection decision would be based on these weights. Finally this paper discusses future work that would be required on this model to provide effective application to the site selection decision process.