

SUMMARY

Introduction

In the fall of 2005, Meng Analysis was commissioned by the Seattle Public Schools to complete a comprehensive survey of the School District facilities. The School District prioritized 80 schools that were to receive building condition surveys, and 73 schools that were to receive educational adequacy surveys.

The building condition surveys are a comprehensive report on each of the major building systems for the selected schools, with a qualitative condition assessment as well as a listing of maintenance and repair deficiencies for each of the building systems. In addition, a structural review was conducted to assess seismic conditions. The survey was conducted by a team of architects, engineers, construction specialists, and cost estimators who visited the selected schools and reported on specific building system conditions.

In addition a team of experienced educational planners and educational architects also visited the selected schools and completed a report on the educational adequacy for each of the schools. This assessment included a review of the school capacity, configuration, and environment and its ability to support the desired educational programs.

This report and its supporting data is intended as a tool for Seattle Public School facility planners, community advisory groups, and district administrators as they make important facility preservation decisions.

Contents

The results of the building condition surveys and evaluations as well as the educational adequacy evaluations are included herein in both summary reports and detail reports. Additionally the data supporting this analysis is included in a relational database intended for ongoing use by Seattle public schools facilities planners and managers.

This report is organized into separate sections containing:

A. Summary reports

- Facility inventory including basic sizes, age, and other vital facility history.
- Building condition including overall condition scores, and summary estimates for maintenance and repair projects.
- Educational adequacy summary scores that rate the schools capacity, configuration, and environment and their ability to support the intended educational program.

B. Educational Adequacy Reports

Each facility is analyzed for both its existing condition as well as the relative ease of implementation or upgrade. This analysis compares the existing facility and each of the major program spaces to the most recent Seattle public school design standards and educational specification goals and objectives.

C. Building Condition Survey

This section included a detailed itemization of building system components that are in need of major maintenance or repair in order to maintain building functionality. Each of the building systems (site components, exterior shell, mechanical systems, electrical systems, etc.) are analyzed and estimates presented for noted deficiencies.

D. Seismic Condition Report

The scope of the structural evaluation of the Seattle Public Schools' Facilities consisted of a walk through of the buildings at each school facility site. Structural surveyors noted the type of structural systems and looked for signs of structural distress, structural deterioration and differential settlement. The structural surveyors also reviewed any construction documents that were made available by Seattle Public Schools and also reviewed past facility condition assessment reports. The ASCE 31-03 Standard "Seismic Evaluation of Existing Buildings" was used to help identify the structural concerns for each building.

The structural vertical and lateral load path have been identified for each building along with the structural concerns with respect to the buildings' current condition and the structural requirements to renovate the buildings to ASCE 31-03 life safety standards. At this time, we have not performed a detailed vertical or lateral analysis of the buildings. Nor have calculations for ASCE 31-03 structural checklist items been performed for this initial level of seismic evaluation. Our recommendations are based on our evaluation methodology noted above and our experience with the renovation of similar buildings in the Puget Sound Area.

Analysis

This comprehensive assessment used a number of methodologies to analyze conditions, both basic building systems as well as educational adequacy. These methods include qualitative scoring (from excellent to needs improvement) as well as numerical ratings and cost estimates for specific building systems. Ultimately these are presented herein as a series of summary reports that the school district can use to prioritize needs based on actual building system conditions, various educational adequacy factors, as well as implementation costs. This analysis does not attempt to prioritize those factors, but presents them in a way that the school district and their planning groups can assign weighted priorities from various perspectives.

Conclusion

Although this survey did not include all of the buildings that have most recently been upgraded or newly constructed, the review teams visited and analyzed some of these facilities in order to understand the district's standards and educational priorities. This survey did include a review of a number of facilities that had been improved in the earlier BEX programs and found these facilities to be performing well on both a systems as well as educational perspective. It is obvious that great progress has been made in this large school district's inventory upgrades to advanced standards. The majority of the facilities included in this survey, however have not received recent major building upgrades, and this portion of the inventory presents a wide variety of facility conditions, from some older facilities that have held up well to some that are performing very poorly and in need of significant upgrade in order to continue to support educational standards. This report should serve the district well in its attempt to understand these important facility resources and to prioritize capital and operations funding where it can be most effective.