## University of New Mexico

## Project Progress Report

CS 542 / 442: Introduction to Parallel Processing Professor Amanda Bienz

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Our team has achieved a solid start to our project over the last few weeks. Since first beginning to work together, our team has accomplished the following:

- Met a number of times, documenting our discussions here: <u>CS 542 Project</u>.
- Developed a modular <u>code repository</u> that is well organized and facilitates parallel contributions.
- Written custom <u>C data types</u> to represent sparse matrix formats.
- Written a <u>file parser</u> to process matrix files.
- Begun an <u>analysis</u> of the theoretical storage requirements for different matrix formats.

Our team plans to build on our current progress by undertaking the remaining tasks to complete our project:

- Finalize our computation/analysis routines.
- Run computation/analysis routines on Wheeler.
- Develop presentation materials.
- Create Project Report.

Over the course of the few weeks that our team has worked together, two details of our project scope have changed since our Project Proposal submission:

- We are including additional analysis of the cost of sending matrices of various densities and formats.
- Our analysis of the performance of matrix operations will focus on matrix transpose based on instructor feedback from our Project Proposal.

To better complete our project, our team would appreciate feedback on the following points:

- What, if any, formatting specifications are there for the report?
- How in depth should the presentation be? How much time will we be allotted?