

**Project Management Plan
Daybreak Parkway Couplet
TWGS Engineering**

General project information

Team Vision Statement

The vision for this project is to help the area around the Daybreak Parkway Couplet in South Jordan become a vibrant and thriving commercial area. This area needs to allow for commercial access as well as place emphasis on pedestrian safety. This will be accomplished by reducing the eighty-fifth percentile speed along the couplets.

Purpose

The purpose of this project is to lower the speed of drivers along the Daybreak Couplet. Lowering the speed will help to increase pedestrian safety, commercial access and reduce the use of the couplet as a speed trap.

Objective

The main objective of this project is to create design alternatives for the daybreak couplet. This main objective will be reached by focusing on a number of smaller objectives, including completing traffic studies, analysing the data gathered from these studies, and researching traffic calming methods.

Scope

The area included in the project is the Daybreak Parkway Couplet in South Jordan, Utah. Located between the couplets is a new commercial center. Speeding has become a problem because it reduces ease of access and pedestrian safety. The first part of this project will be to gather more data about the driving conditions, driving speeds and traffic volumes on this roadway. This data will be analysed and will help determine the problems that are causing excessive speeding. Different alternatives that will use different combinations of traffic calming measures will be developed from the information gathered from the traffic studies and from researching traffic calming measures. These alternatives will be presented and a final report will detail the results of this project.

Project Contact Information

Sponsor Client:

Gary Langston
Kennecott Land Company

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South Jordan, Utah 84095
Tel: 801-204-2000
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Project Manager:

Bryce Albrecht
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Meets with us 5:00 on Mondays for check in and plan for the next week.

Professor Advisers:

Mitsuru Saito - Transportation Engineering

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Breakup of Responsibilities

Shawn Larson – Project Management

Lead research and data collection, helps to ensure validity of data and determine what types of data is needed, Assigns tasks, Provides technical expertise

Bradley Magnusson – Research

Collecting research and analyzing past traffic calming techniques for use in this project. During design phase works with Design team to implement selected alternatives and to

Ken Rose – Data Analysis

Oversee collection and analysis of data from site. As part of these responsibilities provides and organizes google docs and compiles documents. Provides spreadsheets for calculations and gathering of data, assists Shawn Larson with technical expertise topics

Alex Wright – Design Drafting

Creation and compilation of sight drawings, analysis/oversight of existing drawings provided, assist with analysis of data, assist with design implementation

Work Plan

Site Study

- a. Speed Study
 - i. Equipment needed
 1. Radar Gun

Dr. Saito

- ii. Locations
 - 1. 4 designated spots from Kennecott
 - iii. Time
 - 1. Peak Hours 7-9AM and 4-6PM, 1 Weekday (T-TH)
 - 2. Afternoon/Evening 1 Weekend (Fri-Sat)
 - b. Traffic Volume
 - i. Equipment needed Dr. Saito
 - 1. Jamar Counters
 - ii. Locations
 - 1. Intersections
 - iii. Time
 - 1. Peak Hours 7-9AM and 4-6PM, 1 Weekday (T-TH)
 - 2. Afternoon/Evening 1 Weekend (Fri-Sat)
 - c. Pedestrian Volume Dr. Saito
 - i. Equipment needed
 - 1. Jamar Counters
 - ii. Locations
 - 1. Crosswalks
 - iii. Time
 - 1. Peak Hours 7-9AM and 4-6PM, 1 Weekday (T-TH)
 - 2. Afternoon/Evening 1 Weekend (Fri-Sat)
 - d. Site Distance / Measurements
 - i. Locations
 - 1. All areas of concern ie intersections, crosswalks, lanes
 - ii. Striping Plan
 - 1. Given to us by Kennecott

Analysis

- a. Organize data collected / calculate values
 - i. Check Intersections Warrants Traffic Engineering Book
 - ii. Speed analysis
 - iii. Pedestrian Warrants
- b. Identify Problems Areas and Needs
- c. Level of Service Analysis

Alternatives

- a. Research possible traffic calming measures that fit the needs of the site
- b. Submit list of pre-designs for input from sponsor
- c. Cost analysis of the alternatives
- d. Calculate expected outcomes from the selected alternatives
- e. Selection of recommendation
- f. Create CAD drawings of alternatives for submission

Deliverables

- a. Pre-design ideas
- b. 50% Presentation and Report
- c. Final Report
 - i. Alternative CAD Drawings
 - ii. Presentation Poster

Schedule of Key Milestones

Site Studies	2/10/12
Complete all necessary site visits.	
List of Alternatives	3/5/12
Submit our list to the sponsor to develop our final 2-3 alternatives.	
50% Report	3/5/12
Have the final alternatives selected and all decisions made.	
Final Design Drawing	3/30/12
All design related tasks completed.	
Final Report	4/9/12
Submit final report and presentation.	

Project budget

Student Fees	\$8000.00
6 hours per week per student at \$20.00 per hour.	
Transportation	\$60.00
4 round trips	
Graduate Fees	\$600.00
2 hours per week at \$30.00 per hour	
Professor Fees	\$400.00
4 hours at \$100.00 per hour	
Equipment	\$500.00
Rental Fees	
Presentation	\$50.00
Poster, Printing, etc.	
Total	\$9610.00

Communication plan

Working hours:

1. Each group member will work three hours per week individually
2. Our group will meet Mondays from 3-6PM
 - a. We will meet in 270 FB or 423 CB
3. A short weekly meeting with our PM will occur Mondays at 5:00PM.
4. Site visits will be made based on need.

Accounting:

1. Two Google documents will be used to record hours worked on the project individually and what was accomplished
2. Time and accomplishments will be reported to the PM during our weekly meeting

Project Scope

-deliverables in scope (in class assignments, design alternatives, formats they will be in, dates/milestones)

Site Studies

- Speed Study
- Warrant Pedestrian analysis for intersection
- traffic counts
 - where? when?
- Sight distance
- Measurements

Analysis of studies

- identify problem areas and warrants for each location
- Purpose and needs of each intersection

Alternative Design

- Identify preliminary alternatives to bring to owner, before moving to final design alternatives
2-3 alternatives for implementation
- Research of reasons for alternative design
 - Analysis of Alternatives (which to recommend)
 - signage, change of stripes, type of parking, lane width

Have ready schedule of when we can do traffic studies and ask if they will be representative

Are there any schools in the area that would influence?

Which road is bigger problem/issue? Which do you want to focus on?

traffic counts at intersection and roundabouts

speed studies of both roads and couplets

Double check autoCAD files measurements. Are they accurate?

Shoulders?

Level of service desired?