

Activity C11-Design Presentation

Purpose:

The purpose of this activity is to present your timing plan for the corridor system design project.

Learning objective:

Be able to clearly communicate the timing plan design for a corridor based on an analysis of traffic flow quality and corridor performance for a range of timing parameter values and phasing alternatives.

Tasks:

Task 1: Review the information produced for Activity C09 including the deliverables and the supporting analysis that you completed.

Task 2: Prepare a PowerPoint presentation that includes the information needed by a senior traffic engineer to evaluate the corridor timing plan you developed as part of this project. The presentation should not last more than 10 minutes. The presentation should be made with each team member participating. The presentation should cover all major aspects of your final report.

The following specific information should be included in your presentation:

1. System sketch showing intersections and distances between each intersection.
2. Sketch of each intersection showing all approach and lane details.
3. Ring diagram (phasing plan) for each intersection.
4. Objective for setting your offsets (priority movements).
5. Timing parameters for each intersection:
 - split time
 - maximum green time (max 1)
 - yellow time
 - all red time
 - cycle length
 - offset
6. Evaluation of your plan using suitable measures of effectiveness, including travel time, delay, and number of stops. The evaluation must include the base case (your original network), as well as the options that you considered in the development of the final design. You should show the progressive improvement (or not) of each change that you made to your system.

Task 3: Successfully complete your presentation.

Notes to consider:

The presentation should:

- Emphasize visual material and not words that you read.
- Include a short presentation of your VISSIM network to illustrate what you've accomplished in your final design. This could include screen shots showing key parts of the system operations, side by side of before and after VISSIM video, or a movie that focuses on the key things regarding the system performance (and traffic issues).
- Summarize (consensus view) the concepts that your team members learned (together) about traffic signal system design. This latter point should be well thought out and not just a quick list of concepts.
- Emphasize the comparison of the results for each step and the benefits of making each step, at the various levels of aggregation.

Your presentation will also be graded based on:

- The quality of the questions that are asked after the presentation.
- The insights gained from the presentation.
- The degree of constructive feedback (strengths, weaknesses, areas for improvement) provided to the presenting team.