Improving Progression through Alternative Signal Phasing

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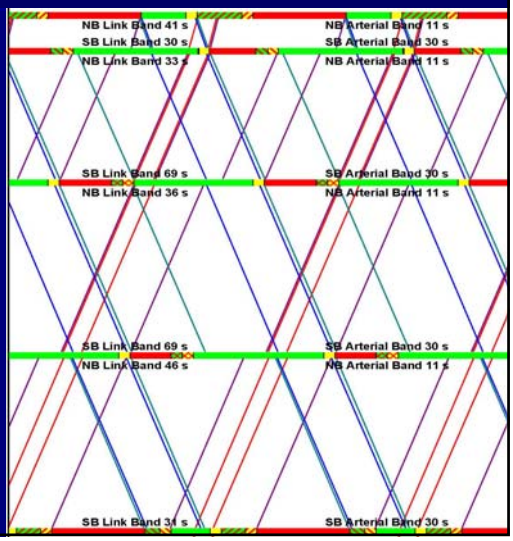
TexITE Summer Meeting
Amarillo, Texas

Background

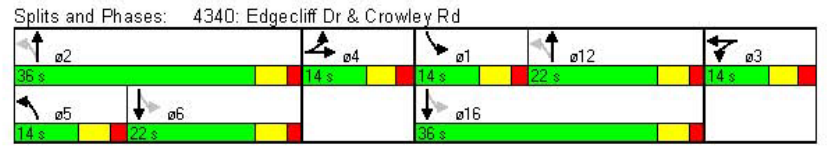
- 7-lane arterial
- 40 mph
- 7 signals maintained by the City of Fort Worth
- 2 signals maintained by TxDOT

Standard Phasing (PM Plan)

- PM Plan has heavy SB traffic
- “Pinch Point” at Edgecliff
- Heavy movement WB Left turn from IH 20 WBFR

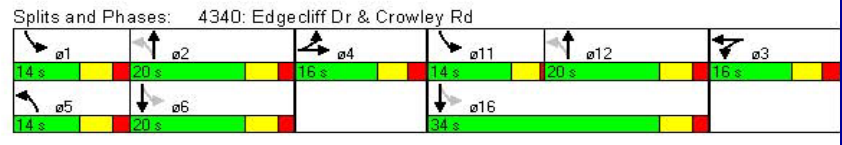


Alternative Ring Structure



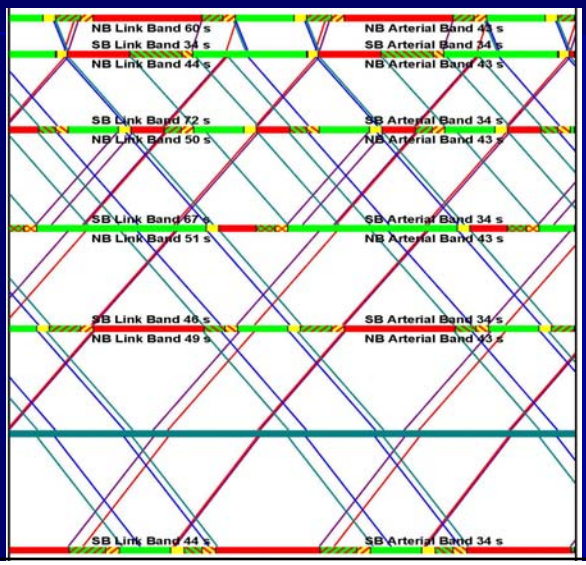
- Used overlaps to power phases 12 and 16
- Skipped left turn phase if previous side street phase was not actuated

Ring Structure Option 2



- Allows “normal” operation by Time of Day
- Omit Phase 1 to use alternative ring structure

Alternative Phasing (PM Plan)



Cabinet Modifications

- NEMA TYPE I
  - Jumper calls from phase 2 to 12 and phase 6 to 16
  - Will place calls on 12 and 16 in free operation
- NEMA TYPE II
  - Place Min Recall on phases 12 and 16 by TOD
  - Use controller to switch calls to phases 12 and 16 and extend the time
  - Allows a “normal” free operation

QUESTIONS?

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