

TO: James L. App, City Manager
FROM: Doug Monn, Interim Public Works Director
SUBJECT: Niblick Road Corridor Signal Synchronization
DATE: July 5, 2005

NEEDS: For the City council to consider the findings of TPG, a consultant hired to explore the synchronization of traffic signals along Niblick Road from First Street to Creston Road.

- FACTS:**
1. The Niblick Road Corridor from First Street to Creston Road is now a four-lane roadway (two lanes each way) as of August 2004.
 2. In addition to the additional traffic lanes, two new signals were installed.
 3. These new improvements have changed the traffic flow within this corridor.
 4. In December 2004, the City Council directed staff to engage the services of TPG Consulting, traffic engineers, to develop a plan to synchronize the signals along Niblick Road.
 5. Their work is complete and they are ready to present the results to City Council.

**ANALYSIS
AND**

CONCLUSION: TPG Consulting gathered field information with regards to the volume of traffic along this corridor, including turning movement counts at each intersection and a speed survey of vehicles traveling along this corridor.

At the Council meeting, TPG Consulting will explain how the following conclusions were developed. Staff, along with the consultants presented these results of TPG's analysis to the School District.

Morning Peak Hours

	Total Travel Time (sec)	Avg Speed (mph)	Total Delay (sec)
No Synchronization	427	9	73
Coordinated (40 mph)	187	20	20
Coordinated (25 mph)	239	15	21

Afternoon Peak Hours

	Total Travel Time (sec)	Avg Speed (mph)	Total Delay (sec)
No Synchronization	635	7	96
Coordinated (40 mph)	273	17	29
Coordinated (25 mph)	336	13	30

As the above table indicates, there would seem to be value in coordinating the traffic signals in that travel time would be greatly reduced (i.e. from 635 seconds to

273 seconds, and 336 seconds during the afternoon peak hours). The consultant recommends that the City Council consider implementing the coordination of the signals at 40 mph.

POLICY

REFERENCE: Adopted Capital Improvement Program

FISCAL

IMPACT: The City Council has adopted a budget of \$49,000 to implement signal synchronization.

OPTIONS:

- a.** Determine that there is value in coordinating the signals along the Niblick Road corridor, and accept the consultant's recommendation to implement the work based on a 40 mph scenario.
- b.** Amend, modify, or reject the above option.