Comments on<br>"Project Development Report:<br>$95^{\text {th }}$ Street and Book Road Intersection Improvements,"<br>City of Naperville<br>May 20, 2019

I. The Report Fails to Identify the Problem that the Proposed Project is Intended to Solve.

The City of Naperville's Project Development Report ("the Report"), proposing to expand Book Road into a 4-lane highway for two blocks north and two blocks south of the intersection of Book Road with $95^{\text {th }}$ Street, nowhere clearly states what is the problem that the Proposed Project is intended to solve. However, the Report seems to imply that the problem is a disproportionate number of traffic accidents at the intersection of $95^{\text {th }}$ Street and Book Road ("the Intersection"). And at the meeting of July 8, 2019, at the $95^{\text {th }}$ Street Naperville Public Library between local residents and Mr. Bill Novack, the Naperville Director of Traffic, Engineering, and Development, Mr. Novack stated that the number of accidents at the Intersection is "triple the national average." (See attached the slide "Safety," prepared by Mr. Novick for that meeting.)

However, the Report actually does not at all support that characterization.
First, there is no average. All we know is that the Report at Page 11 states that the authors of the Report have compared the number of accidents at the Intersection to "a similar intersection in Illinois." That is just one unidentified intersection. Where
is that unidentified intersection? Why should we believe it is comparable? Also, to have a meaningful "national average," there would have to be a count of accidents from about a hundred intersections nationwide, not just one intersection somewhere in Illinois. There is no such count.

Second, the Report at Page 65 (the letter of from José Rodriquez, PTP, AICP, Senior Planner, Research \& Analysis of the Chicago Metropolitan Agency for Planning) states that on each day 68,909 cars $(13,774+13,712+20,626+20,797)$ pass through the Intersection. That is $25,151,785$ cars per year. And the Report at Page 11 states that there are an average of 22.8 accidents each year. $(17+29+14$ $+27+27) / 5$ yrs. That comes to an accident-probability for each car of 0.00000090 . Not bad odds.

But what about the future? Maybe, if Book Road is not expanded into a fourlane highway for four short blocks, the amount of traffic at the Intersection will increase, causing more accidents? (Or maybe the traffic will increase anyway.) The Report at Page 65 estimates that by the year 2040, an average of 95,000 cars $(17,000+18,000+30,000+30,000)$ will pass through the Intersection each day. That is $34,675,000$ cars per year. Then, if we apply the same accident rate, the Report claims that there will be 37.8 accidents per year. That is ( $37.8-22.8$ ) 15 more accidents per year. 37.8 vs. 22.8 appears to be significant. However, those numbers are misleading. The new accident-probability would be $37.8 / 34,675,000=$ 0.0000010. So the real difference is between 0.000009 and 0.000010 . And that
difference is not statistically significant. In fact, it is minuscule. It is too small to measure accurately. Therefore, there is no problem to solve.

## II. The Problem is on $95^{\text {th }}$ Street, not Book Road.

The Proposed Project is to expand Book Road and to leave $95^{\text {th }}$ Street as it is, because $95^{\text {th }}$ Street already is a four-lane highway. But does this make sense? The "Collision Diagrams" shown in the Report at Pages 141 through 145 show that the large majority of accidents at the Intersection occur not on Book Road but rather on $95^{\text {th }}$ Street. For example, in the most recent year for which data is available (Page 145), there were 21 accidents on $95^{\text {th }}$ Street, and 6 on Book Road. So $78 \%$ of the accidents in the Intersection are on $95^{\text {th }}$ Street, although only $60 \%$ of the traffic is on $95^{\text {th }}$ Street. (Report at page 65) Therefore, if there were a problem, the problem is not on Book Road, where the City plans to do all of the expansion. If there were a problem, the problem is $95^{\text {th }}$ Street.

## III. The Proposed Project would Make Book Road More Dangerous.

First, the proposed Project will turn Book Road into a 4-lane highway like $95^{\text {th }}$ Street, which means it will have the same high accident rate that $95^{\text {th }}$ Street now has. That clearly will mean a proportional increase of accidents on Book Road. Of course, all of these accident statistics actually are almost meaningless, because the accident rate for cars with or without the expansion is minuscule.

Second, a faster four-lane highway will be significantly more dangerous for pedestrians. At the community meeting on July 8, 2019, Mr. Novick stated that the Proposed Project would significantly increase traffic velocity on Book Road. It is
bad enough to have to walk across two slower lanes of traffic. It would be much more dangerous to have to walk or run across twice as many lanes, and faster lanes. The Report does not address this problem. Nowhere does the Report attempt to measure the increase in car and car-pedestrian accidents. This is a strange omission.
IV. The Proposed Project would Increase Noise and Lower the Property Values of Everyone Living on Book Road in the Vicinity of $95^{\text {th }}$ Street.

At the community meeting on July 8, 2019, Mr. Novick stated that the Proposed Project would significantly increase traffic velocity on Book Road. Everyone knows that increased traffic velocity means increased noise as well as increased danger. And that means that the property values of everyone living on Book Road in the Vicinity of $95^{\text {th }}$ Street would be lowered. For the same reasons, the Proposed Project would lower the quality of life for those people.

## V. The Report Lacks all Financial Analysis.

The Report, at page 89 predicts a cost of $\$ 2,367,599.00$ for the proposed expansion of Book Road and gives a short, itemized list of costs. But an itemized list is not financial analysis. Financial analysis begins with calculation of the payout date and the rate of return. The number of accidents on Book Road is only six per year. And those are fender-benders, with an average cost of, say, $\$ 4,000$. If so, then the Report proposes to spend $\$ 2,367,599.00$ to save 6 X $\$ 4,000$ or $\$ 24,000$ per year. That is a payout of $\$ 2,367,599.00 / \$ 24,000$ per year $=98$ years and 8 months. It will be 98 years and 8 months before the Proposed Project breaks even.

And the rate of return, with a payout of 98 years and 8 months will be $1 \%$.
If any employee of any business ever proposed to his employer that he spend $\$ 2,367,599.00$ to get a rate of return of $1 \%$ over 98 years, the employee would be fired immediately. The entire Proposed Project is financially irresponsible. \$2-1/2 million here, $\$ 2-1 / 2$ million there, pretty soon it adds up to real money.

## CONCLUSION

The accident rate at the Intersection is so low that it is impossible to measure the effect the Proposed Project would have. But, if anything, it probably would increase the number of accidents, and it certainly would lower the quality of life for residents. And it makes no sense whatsoever financially. The City, and the people involved in the accidents, would be far better off if the City were simply to guaranty to pay all the expenses of everyone involved in those six fender-benders that occur now (maybe seven or eight after the expansion) on Book Road each year.

