

# SAFE ROUTES TO SCHOOL (SRTS) PROGRAM APPLICATION

North Dakota Department of Transportation, Local Government  
SFN 58504 (02-2007)

You may use additional sheets to further describe your project.

|                                                                     |
|---------------------------------------------------------------------|
| Project Name<br>Permanent Solar Powered Radar Signs                 |
| Project Location<br>South 20th Street - East of Ben Franklin School |

## Project Contact Information

|                                                      |                                             |                                    |                   |
|------------------------------------------------------|---------------------------------------------|------------------------------------|-------------------|
| Project Contact<br>City of Grand Forks               |                                             |                                    |                   |
| Project Contact Name<br>Al Grasser, City Engineer    | Email Address<br>agrasser@grandforksgov.com | Telephone Number<br>(701) 787-3777 |                   |
| Address<br>255 N. 4th Street PO Box 5200 Grand Forks |                                             | State<br>ND                        | Zip Code<br>58201 |

## Project Sponsor Information

|                                                      |                                           |                                    |                   |
|------------------------------------------------------|-------------------------------------------|------------------------------------|-------------------|
| Project Sponsor<br>City of Grand Forks               |                                           |                                    |                   |
| Project Sponsor Name<br>Mayor Michael Brown          | Email Address<br>mbrown@grandforksgov.com | Telephone Number<br>(701) 746-2607 |                   |
| Address<br>255 N. 4th Street PO Box 5200 Grand Forks |                                           | State<br>ND                        | Zip Code<br>58201 |

## Funding Information

|                                                                                                                                                   |                                                             |
|---------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------|
| Project Type<br><input checked="" type="checkbox"/> Infrastructure<br><input type="checkbox"/> Noninfrastructure<br><input type="checkbox"/> Both | Project Amount Requested<br>\$13,901.09                     |
|                                                                                                                                                   | Total Project Cost/Source(s)<br>\$13,901.09                 |
|                                                                                                                                                   | Project Cost Estimate (attach detailed copy)<br>\$13,901.09 |

## Project Description

|                          |
|--------------------------|
| *see attached narrative* |
|--------------------------|

Speeding is an issue around our neighborhood schools. Our work day and school day begin at approximately the same time and parents are in a rush to get their kids to school and get to work on time. Therefore, providing a safe route to school and keeping the students safe as they come to school and leave at the end of the day is very important to the Grand Forks community.

Drivers who are speeding have less time to react and be aware of their surroundings. In a survey of driver speeds in 63 school zones across the country, the National SAFE KIDS Campaign found that two-thirds of drivers exceeded the posted speed limit during the before- and after-school hours. Speeding occurred despite the fact that 85% of sites had one or more safety measures (crosswalk, flashing lights, stoplight, or crossing guard) in place. In addition, one-third of drivers were traveling at 30 mph or more, an issue of great concern given that children are eight times more likely to die if hit by a motor vehicle moving at 30 mph, compared to 20 mph or less. The frequency of speeding in school zones suggests that risks in neighborhoods with fewer safety measures are even greater.

**For this reason, the City of Grand Forks is requesting Safe Routes to School Funding to purchase two permanent radar signs to be placed along 20<sup>th</sup> Street near Ben Franklin School. A solar powered radar sign is a self-contained sign that houses a radar unit, solar panels and reader board. In addition these units also record and produce data for reports.**

Twentieth Street, which runs east of the school, is a 2 lane collector with an average daily traffic (ADT) of 4,700 near the school (2005 traffic counts). It has been noted by parents and local residents that traffic speeds during the day are high and they are concerned for the children's safety. Permanent solar powered signs will give us the ability to analyze traffic speeds and determine the greatest need/time for additional studies or enforcement. As a vehicle passes the sign, the vehicle's speed is detected by the radar unit and displayed on the reader board. The idea is to bring a motorist's attention to the speed they are traveling and how it compares to the posted speed limit.

The radar signs helped reduce vehicle speeds. Study results show that vehicles will travel 5-8 km/h (3-5 mi/h) slower than before a unit is placed in-service. As well, observations constantly show that radar speed signs have the greatest impact on those vehicles that are traveling most substantially above the limit. So a reduction in average speed of just a few MPH actually represents a substantial reduction in the speed of those few drivers who represent the greatest risk. The large digital display of "YOUR SPEED" effectively reminds drivers to slow to a safe speed, and studies have shown that a substantial percentage of motorists continue to keep their speed in check after the radar speed sign has been moved on to protect another location.

A solar powered radar sign will cost less than other traffic calming methods; they do not hinder travel of emergency vehicles; and a community's response to a permanent radar device is usually positive rather than negative, as seen with many engineered traffic calming methods. These signs will supplement the current traffic calming devices around



The City of Grand Forks has recently installed a permanent solar powered radar sign near Lewis and Clark Elementary School. This road (13<sup>th</sup> Ave. S.) has high traffic volumes and speed was an issue. The proposed site for a new sign, S. 20<sup>th</sup> St., has very similar traffic volumes and high speeds.

These signs (a sign on the south side of the road monitors traffic in the opposite direction) have worked well to slow traffic in the school zone. The readings are also able to be printed and reviewed by school staff, police and other agencies or depts..

**INFRASTRUCTURE PROJECTS**

|          |                                                       |   |                     |
|----------|-------------------------------------------------------|---|---------------------|
| <b>7</b> | <b>Permanent Solar Powered Radar Signs</b>            |   |                     |
|          | 20th Street - East of Ben Franklin School             |   |                     |
| A.       | Permanent Solar Powered Radar Sign                    | 2 | \$ 9,390.00         |
| B.       | Installation                                          |   | \$ 600.00           |
| C.       | Contingencies                                         |   | \$ 999.00           |
| D.       | Field Design and Field Inspection                     |   | \$ 1,098.90         |
| E.       | Consultant Services/Engineering/Evaluation/Management |   | \$ 1,813.19         |
|          | <b>Project Total</b>                                  |   | <b>\$ 13,901.09</b> |
|          |                                                       |   | <b>\$ 13,901.09</b> |



# SAFE ROUTES TO SCHOOL PROJECT

## CITY OF GRAND FORKS



SOURCE: CITY OF GRAND FORKS  
 PROJECTION: ND STATE PLANE  
 NAME: ARJ  
 DATE: OCT 2009

N  
 SCALE: 1" = 300'

■■■ PROPOSED SIDEWALK

