

GEOPAK Snow Drift Analysis Tool Checklist

The snow control tool of GEOPAK is used to analyze the existing condition of the study corridor and will also analyze the proposed changes to the study corridor.

PHASE 1

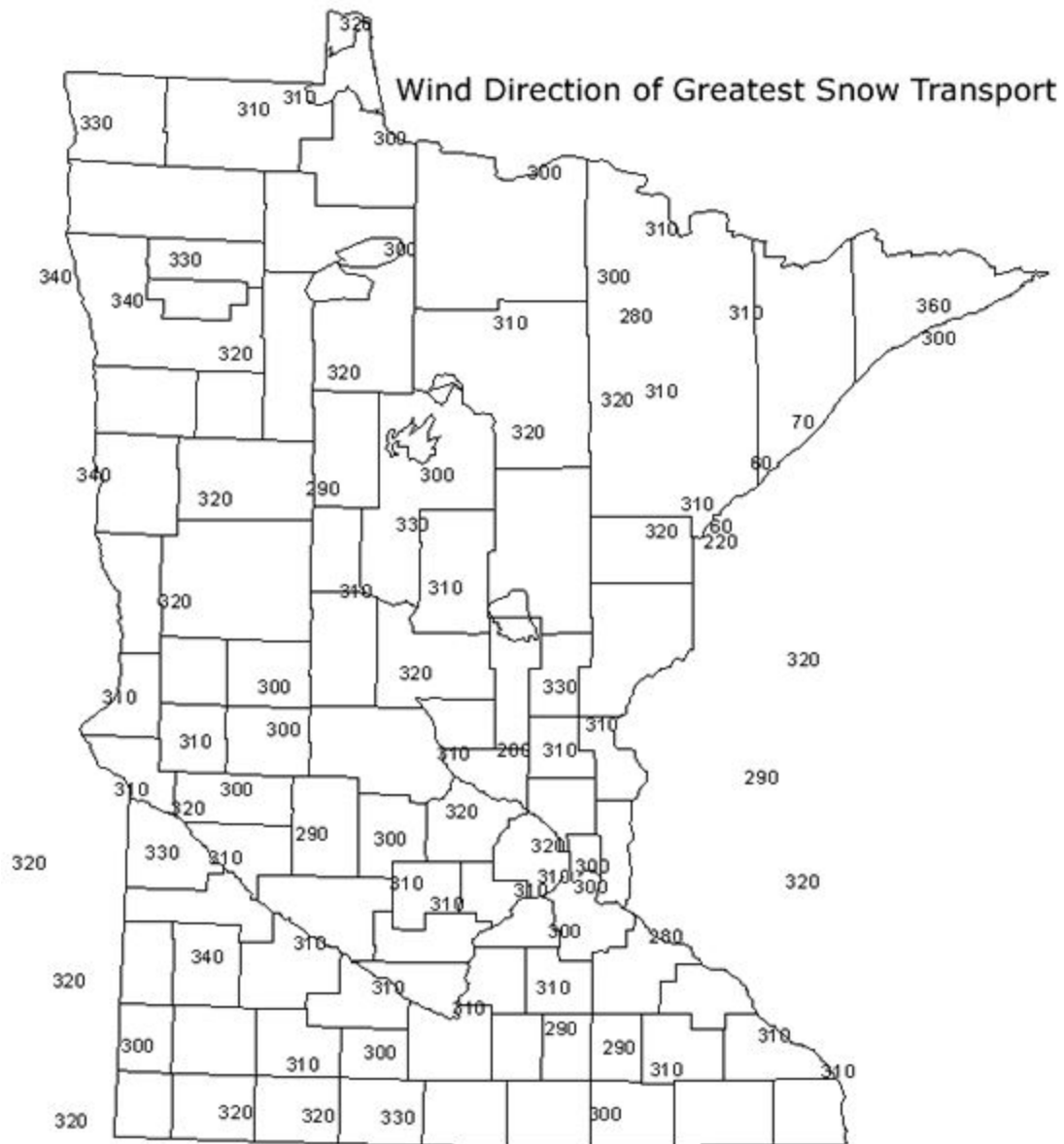
To analyze the existing condition of the corridor there are two requirements:

1. The existing terrain has to be mapped including the roadway itself in XYZ.
 - a. The corridor width should be a minimum of 300 feet from center line.
 - b. The larger the width-(500 feet from centerline) is better.
 - c. The data needs to be saved in a GPK file.
2. Cross section will need to be cut at a minimum 50 foot parallel to the prevailing winds.
 - a. Not perpendicular to the center line.
 - b. For prevailing winter wind direction refer to map on backside.

PHASE 2

Analyzing the proposed corridor changes:

1. Through the design processes, the proposed cross sections are cut.
 - a. These sections are generally cut perpendicular to the centerline.
2. For the best analytical results a second set of sections will need to be cut parallel to the prevailing winds refer to the nearest location on the backside of this sheet.
3. With the parallel wind sections, run the tool to see if the proposed changes will affect the road.
4. If there are negative results,
 - a. Create new section using the snow control sections for each area of negative results.
5. Each time the tool is run; sections cut parallel to the prevailing winds are needed.



Map can be at <http://snowfence.umn.edu/Components/Design/sfdesign4.asp#>
 This map was created through MnDOT Agreement No. 74708 Work Order No. 117 **Climatological Characterization of Snowfall and Snowdrift in Minnesota** through the University of Minnesota.