

- Warmth - clothing and accessories
  - Clothing
    - Head:
      - Balaclava, hats under helmet for warmth
      - Ski/Winter helmets
      - Reducing fog and frost on glasses or goggles
        - Ski goggles
        - Anti-Fog wipes/Cat Crap (wipe on and wipe later)
    - Hands: gloves and/or pogies (Bar-Mitts), lobster gloves, mittens
      - Bike will be more sensitive to cross winds with bar-mitts
      - Practice getting hands in and out with bar-mitts
      - Liner gloves
      - Hand warmers
    - Feet: Shoes with covers or winter cycling boots, wider width for socks -- make sure have room in shoe to wiggle toes
      - Flat pedals, winter boots
      - Overshoes/boot covers
      - base layer socks, outer layer socks
      - Toe warmers (on top of toes, not bottom)
      - Heated socks -- mixed reviews
      - Yak socks, wool, alpaca
    - Tops: base layers, jerseys, jackets (why ventilation is important in a winter jackets), winter jerseys
    - Bottoms: base layers, bibs, winter tights and pants, windproof, waterproof/resistant
- Bike
  - Traction - tires, and studs
    - Tires:
      - Lower tire pressure for increased road grip. However, be sure to have enough pressure to avoid pinch flats.
      - Wider (if possible) for more coverage -- floating on top of the surface (although, some swear by skinny tires for the snow)

- Increased puncture resistance (because it is a pain to deal with a flat in freezing weather)
- Studded tires -- plusses and minuses
- Winter compound for the rubber on tires
- Fenders (front and back)

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- Route choice
  - What routes are clear -- maybe bike lanes are not clear and need to change your route
    - If snows during the day, may have to change route for home commute
  - Traffic levels on different route options, and changes that may occur due to inclement weather
  - May need to ride further in the middle if there is snow on side of road
  - Traction on road
    - Railroad tracks and road paint become much more slippery in freezing weather
    - Black ice
    - Road hazards can be hidden by snow and leaves
    - If you hit a patch of ice, keep the front wheel straight and avoid heavy braking
- Visibility - lights, reflectors and reflective gear – to be seen as well as to see
  - Reflective gear on feet/ankles catch attention better since feet/legs are moving
  - When the sun is in your eyes, motorists have a difficult time seeing you (more often in winter than summer)
- Storage - best ways to carry your clothes, lunch and work things
  - Needs consideration -- may have too bulky gear to wear a backpack, you may need spare clothes for ride home
  - May need panniers -- make sure they're balanced and think about how will affect balance/traction

- Lock
  - Like always, bring lights/panniers/ebike battery indoor
  - If you know it will snow later in the day, do not lock up your bike near the street (think of where the plow will go/slush from the street) Cover the key port so ice does not get in the port.
  - Good idea to have deicer in the bag
- Maintenance - salt, storage and cleaning (Maciej will likely present this section)
  - Bike chain -- dry/wipe down after rides, lube afterwards
  - Wipe down bike to get grime, road salt off -- You can always use wet wipes, baby wipes
  - Wheels: salt and road crap can damage your hubs over winter. Keep an eye/ear on them, have them checked after the season
  - Bottom bracket: salt and road crap can create damage, Before each ride make sure the bottom bracket is secure without play. Have it checked after winter
  - Fenders: protect the rider, keeps the drivetrain cleaner
  - Clean the bike and oil the chain regularly -- using wet lube in winter can keep grime off better (Do not lube chain right before ride.)
  - If steel bike, might want to have frame saver inside the frame
  - Maintenance should be more frequent during winter
  - Maybe buy a cheap beater bike for winter riding
  - Many LBS will do winter maintenance/bike cleanup for you