Privacy by Design (PbD) is an approach to protecting privacy by embedding privacy into the design specifications of technologies, business practices, and physical infrastructures. That means building in privacy up front – right into the design specifications and architecture of new systems and processes. The following is from “7 Foundational Principles of Privacy by Design” found at https://www.ipc.on.ca/english/Privacy/Introduction-to-PbD/.

1. **Proactive** not Reactive; **Preventative** not Remedial

   PbD comes before-the-fact, not after.

2. **Privacy as the Default Setting**

   IT systems and business practices should start out protecting privacy, and not require a person to request privacy, or change settings. Build privacy in by default.

3. **Privacy Embedded into Design**

   Consider privacy when a system or practice is designed, not later. As with default settings mentioned above, build privacy in from the beginning.

4. **Full Functionality — Positive-Sum, not Zero-Sum**

   PbD does not suggest that privacy is more important than other aspects of a system or practice—because that would mean it is a competition. PbD recommends trying to work together to accomplish goals with a “win-win” philosophy.

5. **End-to-End Security — Full Lifecycle Protection**

   PbD recommends considering the entire life cycle, from the decision to collect information all the way through its use, retention, and disposal. PbD focuses on “cradle to grave, secure lifecycle management of information, end-to-end.”

6. **Visibility and Transparency — Keep it Open**

   PbD recommends keeping any promises and meeting privacy goals. A system or practice must ensure that all “parts and operations remain visible and transparent, to users and providers alike.”

7. **Respect for User Privacy — Keep it User-Centric**

   PbD emphasizes that each piece of information that gets collected is about an individual. When making privacy decisions, “architects and operators [should] keep the interests of the individual uppermost by offering such measures as strong privacy defaults, appropriate notice, and empowering user-friendly options. Keep it user-centric.”