

Dear Members of the Sioux Falls City Council;

12/19/2018

This is a request for information per the Freedom of Information Act; concerning the plans that you may have implemented concerning 5G Technology, the Smart Grid, IoT, and anything that may indicate that you plan on making Sioux Falls a smart city.

1. Do you have a 5G strategy?

1.1 If yes, I request to see the complete strategy, its ambitions and its objectives in a Word, PDF or picture format.

1.2 If yes, has the public had the opportunity to read and understand the City Council's planned 5G Strategy; been informed of the benefits and/or risks involved in installing it, and been given the opportunity for public input? Where was this information published, if anywhere?

1.3 I also request a supplementary document that includes the highest level of detail on all 5G technology that's planned to be used and currently in use in public spaces within the city limits of Sioux Falls; including the following information:

(a) Companies and entities involved and the names of the company/entity officers.

(b) Specification sheets of all 5G technology.

(c) What technology, e.g., units and arrays are not currently 5G, but can be 5G enabled, e.g., with current software, future software, hardware upgrades or retrofitting?

(d) What U.S. and International safety standards are those of the City Council complying with for the 5G strategy and existing 5G technology.

(e) I request proof, e.g., a certificate from City Council that confirms that U.S. and International safety standards for workers and the public have been met.

1.4 I request all documentation, memos, emails and communication on companies and entities you're in talks with regarding the formulation of a 5G strategy.

2. I request the name(s) of the Officer(s) in charge of the 5G strategy and roll out including their CV and qualifications in 5G and Smart Cities; and who their subject area expert or consultancy is, their CV and qualifications on 5G and Smart Cities.

3. Are you in talks with any experts, companies or entities about autonomous vehicles (AV) for public transport and/or private use on Public Highways?

3.1 If yes, I request to see the complete strategy, its ambitions and its objectives in a Word, PDF or picture format.

3.2 I also request a supplementary document that includes all levels of detail on:

(a) Companies and entities involved and the names of the company/entity officers?

(b) Specification sheets of all technology.

(c) What type of communication system will those of the City Council be utilizing to control the vehicles?

(d) What U.S. and International safety standards does your AV strategy and rollout comply with?

(e) I request proof, e.g., a certificate from City Council that confirms that U.S. and International safety standards for workers and the public have been met.

3.3 If no, I request all documentation, memos, emails and communication on companies and entities you're in talks with regarding the formulations of an autonomous public and private vehicle technology strategy.

4. Do you have a strategy for smart roads and smart signage on Public Highways and Public spaces?

4.1 If yes, I request to see the complete strategy, its ambitions and its objectives in a Word, PDF or picture format.

4.2 I also request a supplementary document that includes all levels of detail on:

(a) Companies and entities involved and the names of the company/entity officers?

(b) Specification sheets of all technology.

(c) What technology, e.g., units and arrays will not be 5G, but can be 5G enabled, e.g., with current software, future software, hardware upgrades or retrofitting etc., and please, could you must be specific on anything here?

(d) What U.S. and International safety standards does your 5G strategy and rollout comply with?

(e) I request proof, e.g., a certificate from the City Council that confirms that U.S. and International safety standards for workers and the public have been met.

4.3 If no, I request all documentation, memos, emails and communication on companies and entities you're in talks with regarding smart roads and smart signage.

5. Are you planning to LED street lighting system rolled out?

5.1 If yes, please answer these questions:

- (a) What is the CMS and specification of the software and hardware of the LED street light system?
- (b) What type of waveform is the LED; e.g., Square wave?
- (c) Can you control the Pulse Width Modulation (PWM) of the streetlight system using the CMS?
- (d) Can you control the PWM of each streetlight that's connected to the system?
- (e) What restrictions do you have in place for the control of the PWM?
- (f) What is the U.S., and International safety limit (low and high) for the amount of "flicker" (Hz) the Human Body and eyes can be exposed to and for how long?
- (g) I request to see the training manual and safety operation manual for the CMS and the LED streetlight system.
- (h) Who is the company who is installing or has installed the CMS LED streetlight system?
- (i) What company maintains and repairs the CMS and LED streetlight system?
- (j) What entity or Officer is or will be responsible for monitoring the safety standards for the CMS and LED streetlight system?
- (k) I request proof, e.g., a certificate from the City Council that confirms that U.S. and International safety standards for workers and the public have been meet.
- (l) What is the amount of Blue Light leakage that's safe for the public and workers during the LED streetlights operation?
- (m) What level of LED streetlight exposure is safe for the public at daytime and nighttime?
- (n) Is there a legal requirement for diffusers to be fitted to LED streetlights?
- (o) How have you have addressed the amount of Oxidative Stress on Human and Animal cells that's produced from LED?

5.2 If no, then I request a declaration from the City Council that you will not be installing LED streetlights in the future. If you cannot provide a declaration, I would like the following answered in the future tense:

- (a) What is the CMS and specification of the software and hardware of the LED street light system?
- (b) What type of waveform is the LED; e.g., Square wave?

- (c) Can you control the Pulse Width Modulation (PWM) of the streetlight system using the CMS?
- (d) Can you control the PWM of each streetlight that's connected to the system?
- (e) What restrictions do you have in place for the control of the PWM?
- (f) What is the U.S. and International safety limit (low and high) for the amount of 'flicker' (Hz) the Human Body and eyes can be exposed to and for how long?
- (g) I request to see the training manual and safety operation manual for the CMS and the LED streetlight system.
- (h) Who is the company who is installing or has installed the CMS LED streetlight system?
- (i) What company will maintain and repair the CMS and LED streetlight system?
- (j) What entity and Officer is responsible for the safety standards for the CMS and LED streetlight system?
- (k) I request proof, e.g., a certificate from City Council that confirms that U.S. and International safety standards for workers and the public have been meet.
- (l) What is the amount of Blue Light leakage that's safe for the public and workers during the LED streetlights operation?
- (m) What level of LED streetlight exposure is safe for the public at daytime and nighttime?
- (n) Is there a legal requirement for diffusers to be fitted to LED streetlights?
- (o) How have you have addressed the amount of Oxidative Stress on Human and Animal cells that's produced from LED?

6. I request all memos, presentations, documents, plans, rollouts, emails and details regarding 2G, 3G, 4G and 5G WiFi in public spaces.

I realize that putting together this quantity of information will take some time. When it is all put together, you can send it to my home at 701 S Duluth Avenue, #1; Sioux Falls, SD 57104; or if there is anything you cannot provide, I would like to be informed of that too. Thank you for your time concerning this matter.

Christopher, The Living Man