

Smart City Strategy Implementation Plan

As of November 28, 2016

This Implementation Plan complements the Action Plan recommended within the Smart City Master Plan. All timing and planned approaches are based on current estimates and resources. City Council budget approval is required for all funding requirements, and business cases and capital charters noted within this implementation plan often have connections to multiple strategies. The Plan is sorted by Master Plan strategy number and section for clarity.

Action Number and Short Description	Master Plan Rationale	Priority	Output(s)	Summary of Planned Approach	Current Status	Planned Launch or Timing	Resource Requirement	Council Involvement
A.1.1 Municipal Network Expansion	P. 27	High	Multi-Year Capital Project, Ongoing Administrative and Contractor Effort	Build required municipal area network infrastructure to and between municipal facilities and specific fixed assets (such as traffic signals and utilities), to improve capacity, service, and cost efficiency / return on investment. The first phases have connected 17 municipal sites, and a 2017 Capital Charter describes resources required to connect another 41 sites and complete the core network. Following expected completion in 2019, future network expansion will occur as new City assets are added or as the community grows.	Initial Sites Connected, Next Phases Pending Resources	2016 - 2019	2017 Capital Charter (ITSV-009) for Municipal Network	Approve Resources
A.1.2 Municipal Network Standards & Conduit	P. 29	High	Industry Engagement and Policy Amendment	Update the City's Engineering Standards to include municipal conduit as a feature of neighborhood developments. The City would pay for its conduit, with the development industry performing the installation in a coordinated manner, as per development agreements. The City will also ensure that conduit is installed where required during any road or service rehabilitation project - a "dig once" philosophy. This directly supports future municipal network extensions (strategy A.1.1) and would minimize future costs significantly.	Engagement Complete, Standard Update Pending	2017	Current Staff Capacity	Approve Resources for Network Expansion (A.1.1); Receive Engineering Standard Amendments
A.2.1 Residential Internet Improvement	P. 30	High	Ongoing Administrative Effort	Encourage Internet service providers, governments, and other stakeholders to invest in improving residential internet service in St. Albert. This would include advocacy efforts, direct contact, and possibly other actions. No direct City investment or incentive is planned.	Council Resolution Approved, Priorities Approved, Work Ongoing	2016	Current Staff Capacity	Approve Direction and Advocacy Priorities
A.2.2 Public Wi-Fi Service & Cellular Coverage	P. 32	High	Ongoing Administrative Effort	Engage with Internet service providers to offer free wireless Internet access in public facilities and gathering spaces, at no cost to the City. Expand to new sites as identified, covering most public facilities in St. Albert. At full build-out, most of the public facilities and gathering spaces (other than naturalized parks) would be covered by free public wi-fi. Cellular service providers will also be engaged to ensure adequate cellular reception within public facilities, and to continue to expand their networks as the city grows.	Resolution Approved, Multiple Sites Connected, More Public Facilities Pending	2016	Current Staff Capacity	Approve Direction Via Council Resolution
A.3.1 Employee Innovation Program & Supports	P. 33	High	New Multi-Level Program, Ongoing Administrative Effort	Design a corporate innovation program that would support employees with innovation policy and processes, remove barriers, provide resources and training, recognition programs, challenges and idea forums, and more. Part of the 2017 Business Case for Smart City Supports would conduct initial assessments and a design in support of a corporate innovation program, and future program launch would be contingent on a future business case (TBD).	New Program, Pending Resources	2017	Some resources within 2017 Business Case "Smart City Supports"	Approve Current Resources, Approve Future Policy / Project Direction and Resources, if Required
A.3.2 Digital Workplace Tools for Employees	P. 35	High	Annual Capital Projects and Ongoing Administrative Effort	Support a modern digital workplace for employees, fostering collaboration through new technologies and physical supports, such as mobile devices, remote network / field access, office collaboration systems, information sharing tools, modern office designs, and more. Efforts are reliant on a strong corporate technology foundation (strategy IM.3) which provides many of the required tools, and two annual Capital Charters have funding that is utilized for digital workplace tools and devices. The ITS Long Term Department Plan also describes the direction on many of these items and the update of the plan will elaborate on this initiative.	Existing Program, Requires Annual Resources	2016	Within Annual Capital Charter (ITSV-001) for Office Automation, and Annual Capital Charter (ITSV-002) for Office Systems Replacement	Approve Resources; Approve ITS Long Term Department Plan update
A.3.3 External Collaboration & Participation	P. 36	High	Program Expansion, Ongoing Administrative Effort	Continue to collaborate externally on matters important to St. Albert, and participate in Smart City organizations. This includes membership in associations and external networks (such as the Alberta Smart City Alliance, Smart Cities Council, Intelligent Community Forum, Municipal Information Systems Association, and others), intermunicipal / intergovernmental collaboration, review of municipal trends and partnership opportunities, submission of blogs and articles, participation in public policy reviews, and best practice sharing. Part of the 2017 Business Case for Smart City program supports the City's continued involvement in the Alberta Smart City Alliance and St. Albert's outreach to others.	Existing Program, Smart City Outreach Requires Additional Resources	2016	Some resources within 2017 Business Case "Smart City Supports"	Approve Resources; Approve Extension of Smart City Alliance MOU; Participate in Collaboration Efforts as Required
A.3.4 Academic Links & Placements	P. 37	High	Program Expansion, Ongoing Administrative Effort	Expand connections with academic institutions and others to support pure and applied research supporting municipal innovation (often at low or no cost). Current efforts include capstone projects, local testing of technologies, meetings between regional organizations, and more. Expansion of departmental student work placements / internships also to be reviewed, and subject to availability of funding.	Some Connections Established, More Shared Projects Pending, Internship Program Pending Resources	2016	Dependent on Staff Capacity	Approve Future Resources, if required
A.4.1 Public Digital Literacy Support	P. 39	Medium	Program Expansion, Ongoing Administrative Effort	Continue to provide user education and engagement with new digital services and public technologies. The St. Albert Public Library works to support this, providing public computer access, digital literacy/technology education programs, and fostering life-long learning in the community. A small portion of the 2017 Business Case for Smart City supports would provide for some City involvement in public education on Smart City services, and outreach around Smart City concepts.	Existing Program Through Library, Smart City Outreach Pending Resources	2017	Some resources within 2017 Business Case "Smart City Supports"	Approve Resources
A.4.2 Community Co-Creation Program	P. 40	Medium	New Multi-Level Program, Ongoing Administrative Effort	Launch a "Mayor's Innovation Roundtable" series focused on Smart City themes, and approaches to local challenges or opportunities. Also host or support local idea sharing events, forums, and work directly with the community to beta test new digital services and co-create on their design where possible. The City has focused on co-creation as part of its public engagement plans, and a 2017 Business Case has also been proposed that would add a bit of funding for local idea sharing. Efforts are also connected to the development of a living lab program for St. Albert (strategy B.4.1) which includes many of these principles.	Innovation Roundtable Under Development, Other Co-Creation and Events Pending Resources	2017	Some resources within 2017 Business Case "Smart City Supports"	Approve Resources, Engage in Co-Creation Activities and With Innovators
A.4.3 Resident Smart City Recognition Program	P. 41	Medium	Program Expansion, Ongoing Administrative Effort	Enhance the City's "Community Recognition Program" by launching an online system to encourage residents to share ideas, and provide examples of how they integrate "Smart" technologies in their homes and lives, or get involved in co-creation activities, local innovation events, and more.	Pending Capacity	2017	Current Staff Capacity	Engage in Idea Sharing and Recognition of Resident Successes
B.1.1 Business Internet Improvement	P. 44	Medium	Direction of City's Role in Business Internet Provision	Explore the City's potential role in improvement of internet service to local business in support of business retention and economic growth. A range of options are under review as per Council direction. Any resource requirements would be addressed through a future Capital Charter. **Analysis coming to Council in Q2 2017, which will direct next steps. **	Under Review	TBD - Q2 2017 Review	Requirements Under Review	Approve Direction via Council Resolution, Approve Resources (if required)

Action Number and Short Description	Master Plan Rationale	Priority	Output(s)	Summary of Planned Approach	Current Status	Planned Launch or Timing	Resource Requirement	Council Involvement
B.1.2 Access to Public Network	P. 46	Medium	Direction on City's Leveraging of Municipal Network Infrastructure	Determine the City's approach to licensed access to Municipal Area Network spare fibre optic strands, and the potential to generate revenue and to catalyze new market competition. If licensing is approved, policy would be created to set conditions and requirements for public and private organizations. **Analysis coming to Council in Q2 2017, which will direct next steps.**	Under Review	TBD - Q2 2017 Review	Requirements Under Review	Approve Direction via Council Resolution
B.1.3 Network Model & Partnerships	P. 47	Medium	Direction on Municipal Network Infrastructure Partnerships and Model	Examine future network expansion, ownership, and maintenance arrangements for the Municipal Area Network. Action on this strategy would be contingent on decisions related to Business Internet Improvement (B.1.1) and Access to Public Network (B.1.2). **Analysis coming to Council in Q2 2017, which will direct next steps. **	Under Review	TBD - Q2 2017 Review	Requirements Under Review	Approve Direction via Council Resolution, Approve Future Agreements (If Required)
B.2.1 Bus, Data, Analytics & Education	P. 48	Low	Program Expansion, Ongoing Administrative Effort	Expand Smart City supports to local business, such as targeting future open data releases to business requirements, providing direct data visualizations and analytics, and offering targeted workshops for interested parties. The City currently uses airborne drones to capture images of development areas, and offers workshops focused on other business topics. Future efforts would rely on capacity within Economic Development and on approval of business cases for open data (strategies F.3.1, F.3.2, F.3.3) and business intelligence / analytics programs (strategy F.2.1).	City Offers Some Services, But Enhanced Data and Smart City Supports Are Pending Capacity and Program Launches	2017	Resources within 2017 Business Case "Open Data Portal" and 2017 Business Case "Support for Business Intelligence Program"	Approve Resources for Supporting Programs Approve Open Government Policy
B.2.2 Location-Based Movement Data	P. 49	Low	New Capital Pilot Project (within Larger Program), Ongoing Administrative Effort	Launch a pilot of pedestrian and vehicle counting technologies in high traffic public areas (not within private locations), to provide valued data for the municipality and for local business. Administration would connect with academic institutions, entrepreneurs, and/or local businesses to directly support efforts. Aspects of this connect directly to efforts related to Smart City business services (strategy B.2.1) and the expansion of internet of things / sensor infrastructure (strategy F.1.1).	IOT Plan Under Review and Tied to Other Sensor Pilots	2017 or 2018	Requirements Under Review	Receive Pilot Outcomes and Approve Future Resources, if required
B.2.3 Business Smart City Recognition Program	P. 50	Low	Program Expansion, Ongoing Administrative Effort	Enhance the City's "Community Recognition Program" to recognize businesses integrating innovative or "Smart" applications into their operations, or being involved in co-creation activities, local innovation events, and more. Connect with the St. Albert Chamber of Commerce awards of distinction as well.	Pending Capacity	2017	Current Staff Capacity	Engage in Idea Sharing and Business Successes
B.3.1 Centre of Excellence Promotion	P. 51	Medium	Amendments to Economic Strategies, Ongoing Administrative Effort	Support local economic development by integrating Smart City themes and successes into select economic promotional materials and strategies. This would be done in an effort to differentiate and promote the City to attract new investment and partnerships. The City would be positioned as a Canadian Smart City "centre of excellence" – a reference site and target for new investment.	Strategy Alignments Under Development, Pending Capacity	2017	Current Staff Capacity	Approve Resulting Economic Strategies
B.3.2 Business Incubation Supports	P. 53	Medium	Inclusion in New City Strategy, Ongoing Administrative Effort	Include innovative and 'Smart' businesses as a target sector within the City's pending Business Incubation Strategy, and future programs. Efforts have some connection to the City's potential 'living lab' testing program (strategy B.4.1) as well.	Strategy Under Development	2017	Requirements Under Review	Approve Business Incubation Strategy and Resources, if Required
B.3.3 Innovation District Designation	P. 54	Medium	Statutory Plan Amendment, Ongoing Marketing	Review the designation of an innovation district that could label an area to attract small and large business, academic institutions, technology labs, entrepreneurs, health authorities, and innovation centres. The area(s) would typically require collaborative industry opportunities, population density, public transit, fast broadband connectivity, and affordable office space. Depending on the location(s) selected, some marketing and redevelopment supports could be required. Connected to the 2018 Capital Charter to review the Mun. Development Plan.	Pending Resources	2018	2018 Capital Charter (PLAN-001) for MDP Review	Approve Bylaw Amendments and Resources
B.4.1 Living Lab Policy / Process	P. 55	High	New Program, Ongoing Administrative Effort	Design a public-private testing program for entrepreneurs, industry leaders, and academics to explore solutions to real world issues, and test technologies or ideas. The City's involvement would often be at low or no cost, and would focus on the development and commercialization of ideas, business incubation and acceleration, a higher community profile, and more. Supporting policy and process would be required, and the City's role and supports would be evaluated on a case-by-case basis. Part of a 2018 Business Case would support the program administration in addition to an innovation fund (strategy IM.7) and other Smart City initiatives related to co-creation.	Under Review	2018	Potential 2018 Business Case for Living Lab Program Resources	Approve Policy, Resources, and Ongoing Program Reviews
B.4.2 Multi-Sector Innovation Centre	P. 56	High	Multi-Year Capital Project, Ongoing Administrative Effort	Catalyze cross-sector innovation by exploring, as St. Albert considers its own civic space requirements or in other non-municipal facilities, partnerships that could foster the co-location of entrepreneurs, business, academic, and public innovators. For example, shared spaces would be assessed to support both municipal offices and operations centres in addition to academic institutions, businesses, research labs, technology showcase space, business incubation, and other complementary elements. Specific projects could be advanced between partners. Detailed analyses of benefits and risks would be prepared, and the effort could be a marginal addition to the New Civic Facility project in the City's 10 Year Capital Plan.	Not Started, Future Project	2023	2021-2023 Capital Charter (COUN-021) for Civic Building	Approve Additional Resources (if any), Approve Project Proposals

Action Number and Short Description	Master Plan Rationale	Priority	Output(s)	Summary of Planned Approach	Current Status	Planned Launch or Timing	Resource Requirement	Council Involvement
C.1.1 Intelligent Transportation System (ITS) Strategy Development	P. 59	High	Multi-Year Capital Project, Ongoing Administrative Effort	Develop a detailed strategy on intelligent transportation system (ITS) development, planning how the City will implement these systems and provide for safer, more efficient, and more coordinated movement of people and goods. The strategy will build on the City's existing ITS and telecommunication investments, discuss program rationale, what we've done, and where the City will go. Part of the 2017 Capital Charter for the implementation of the Transportation Master Plan would support this effort, and the Capital Charter for ITS Modules and Signal Optimization would advance the City's capabilities.	Pending Resources	2017	2017 Capital Charter (ENG-066) for ITS Strategy; 2017 Capital Charter (COUN-XXX) for ITS Modules and Signal Optimization. Note Charter COUN-XXX was submitted for budget consideration by a Councilor after the budget was compiled	Approve Strategy, Approve Resources
C.1.2 Regional Transportation Timing & Data Sharing	P. 61	High	New and Ongoing Administrative Effort	Negotiate ongoing transportation data sharing protocols with regional neighbours such as the City of Edmonton, Sturgeon County, and the Province of Alberta. Work to facilitate efficient mobility across boundaries and supports seamless regional traveller information systems, faster emergency response, better information for mobile application development, and better regional transportation planning and analytics. The City would also ensure that regional data is incorporated into its planning and that its own data is collected and presented consistently. Connects to other Smart City efforts relative to improving corporate data management (strategy IM.3) and a community data hub (strategy F.5.2).	Pending Capacity	2017	Dependent on Available Staff Capacity	Approve Resources for Supporting Programs
C.2.1 Traveller Trip Information	P. 62	Medium	New and Ongoing Administrative Effort	Develop processes to provide data and/or infrastructure (dynamic roadside messaging signage, monitoring systems, etc.) to ensure transportation information is offered to travellers both directly and indirectly. Could include road conditions, travel times, congestion / usage, and more. Efforts dependent on the City's future intelligent transportation strategy (strategy C.1.1), and data systems (strategy IM.3).	Pending Strategy Completion	TBD Pending Result of ITS Strategy	Future Requirement(s) TBD	Approve Resources for Supporting Programs
C.2.2 Parking Management Sensors	P. 63	Medium	New Capital Pilot Project (within Larger Program), Ongoing Administrative Effort	Initiate a pilot to install simple sensors at the entrances / exits of congested public parking lots, to collect real data on usage by time, occupancy type, and more. As new facilities are constructed, particularly park and ride installations, parking sensors would be primary inclusions. Data from the systems can also be displayed on digital entrance signs to communicate numbers of available spots, and even pushed to personal mobile devices or third party mobile applications. Next steps would be dependent on the completion of an Intelligent Transportation System Strategy (strategy C.1.1).	Under Review and Tied to Other Sensor Pilots	TBD Pending Result of ITS Strategy and Facility Projects	Future Requirement(s) TBD	Review Pilot Outcomes and Approve Future Resources, if required
C.3.1 Modern Rider Services	P. 64	Medium	Capital Project, Ongoing Administrative Effort	Enhance Smart City transit technologies, such as "interactive voice response" for real time schedule information, "automated stop announcement" which announces stops on every trip to particularly aid visually impaired customers, "automatic passenger counters" which record passenger volumes, "real-time trip planner" that uses Google Trip Planner and vehicle location (AVL) information to provide real trip connection information, and "real-time trip arrival wayside signs" to provide information directly on route. Also aligns with the Smart Bus and regional Smart Fare (electronic fare payment) projects.	Some Initiatives Underway, Some Pending Resources	2016	2019 Capital Charter (TRAN-027) for Transit Technology Future Requirement(s) TBD	Approve Resources and Ongoing Enhancements
C.3.2 Transit Vehicle Priority Systems	P. 66	Medium	Capital Project, Ongoing Administrative Effort	Equip public transit vehicles with systems that facilitate priority at local intersections, to support both the efficiency and desirability of local public transit. A 2018 Capital Charter resources this, and also provides priority systems for snow clearing vehicles, to ensure faster and safer clearing.	Pending Resources	2018	2018 Capital Charter (TRAN-009) for Transit Priority Signals	Approve Resources
C.4.1 Future Vehicle Review & Pilots	P. 67	Low	Capital Project (Including Review), Outreach to Pilot Partners	Conduct a review of the future implications related to connected and autonomous / self-driving vehicles, and continue to work with the University of Alberta and other partners within the ACTIVE-AURORA national connected vehicle test bed. A 2017 Business Case to prepare a formal Intelligent Transportation System strategy includes this effort, and a 2017 Capital Charter also provides for equipment that would support future vehicle integration.	City Participating in Test Bed, Review of Implications Pending Resources	2017 - 2020	2017 Capital Charter (ENG-066) for ITS Strategy; 2017 Capital Charter (COUN-XXX) for Connected Vehicle Signal Systems	Approve Resources and Review Pilot Outcomes
C.4.2 Emerging Modes & Sharing Models	P. 68	Low	New Bylaw and Council Policy	Prepare a vehicle for hire bylaw to clarify local regulations and respond to transportation innovations and evolving modes, including those within the sharing economy (i.e. ride sharing through companies such as Uber). Future policy work regarding bike and car sharing will also be required, and is pending review.	Bylaw Under Development, Future Policy Work TBD	2017 (Bylaw), 2018 (Policy on Other Sharing)	Current Staff Capacity	Approve Bylaw and Policy Requirements
D.1.1 Infrastructure Efficiency Policy and Program	P. 71	Medium	Policy Statements and Expanded Program including Multiple Projects	Develop policy and initiatives to advance resource conservation, reduced greenhouse gas emissions, environmental stewardship, and return on investment. On the City's fixed and mobile infrastructure emphasize energy efficiency, adaptive lighting systems, and electric power sources. This includes advancing efficiency projects, electric power sources and chargers (such as electric transit buses), Smart and low power lighting, waste heat capture, energy assessments, and so forth. A Sustainable Buildings Policy and multiple Capital Charters have been proposed to support these initiatives, and multiple projects have been completed as well.	Some Efficiency Initiatives Underway, Some Pending Resources	2016	2017 Capital Charter (CSS-006) for Heat Recovery; 2017 Charter (CSS-007) Smart Building Monitoring Systems; 2019 Capital Charter (CSS-008) for Energy Re-Assessment; 2017 to 2025 Capital Charter (PW-004) for Energy Eff Program Future Requirement(s) TBD	Approve Sustainable Building Policy and Resources
D.1.2 Local Development Innovation	P. 73	Medium	Bylaw Review and Ongoing Administrative Effort	Encourage and facilitate local developers and others to apply innovative materials, methods, and energy efficiency solutions. The City would also review the Land Use Bylaw and supporting regulations for alignment. 2019 Capital Charter for Land Use Bylaw review process would be a target for inclusion of new innovation requirements.	Some Developments Pursuing Innovation, LUB Review Requires Resources	2017 - 2019	2019 Capital Charter (PLAN-005) for Land Use Bylaw Review	Approve Bylaw Amendments (Pending Review) and Resources
D.1.3 Utility Usage Notifications	P. 74	Medium	Capital Project and Industry Engagement	Provide residents and businesses with new metering system that would collect and report water usage data quickly and accurately, and provide remote monitoring, leak notices, and more timely billing. Longer term focus includes monitoring of waste systems and working with energy and gas providers on metering.	Meter Project Pending Resources, Waste System and Other Metering Not Started	2017 for Water Meters, 2019 or Later for Waste and Energy	2017 Capital Charter (WATER-016) for Update Meter Reader Technology Future Requirement(s) TBD	Approve Current Resources, and Potential Future Agreements Between Providers
D.2.1 Renewable Energy Systems	P. 76	Low	Capital Project, Ongoing Administrative Effort	Install renewable energy systems on City facilities and other infrastructure, with an emphasis on solar energy micro-generation. Capital Charters have been proposed to utilize available roof space at eleven civic facilities to produce renewable solar energy, and to install co-generation systems at Servus Place to generate savings. Some elements will be referenced within proposed Sustainable Buildings Policy, and others within environmental strategies. Future technologies, such as innovations in the area of kinetic and solar energy, require additional review.	Some Systems Installed, Some Pending Resources	2016	2017 to 2021 Capital Charter (COUN-029) for Solar Program; 2017 to 2019 Capital Charter (CSS-005) for Co-Generation Future Requirement(s) TBD	Approve Current Resources, Approve Future Policy Amendments and Resources, if Required

Action Number and Short Description	Master Plan Rationale	Priority	Output(s)	Summary of Planned Approach	Current Status	Planned Launch or Timing	Resource Requirement	Council Involvement
D.2.2 District Energy Supports	P. 77	Low	Industry Engagement and Ongoing Administrative Effort	Develop awareness programs, incentives, and/or regulations to encourage district energy systems across the community. Whole neighborhoods could be supported through district energy systems. Additional review and engagement with industry is required.	Under Review	2019 or later	Future Requirement(s) TBD	Approve Future Bylaw or Policy Amendments and Resources, if Required

Action Number and Short Description	Master Plan Rationale	Priority	Output(s)	Summary of Planned Approach	Current Status	Planned Launch or Timing	Resource Requirement	Council Involvement
E.1.1 Fun & Convenient Features	P. 80	Low	Policy Amendments, Launch Review	Initiate a review of potential public amenities and locations suitable to be infused with convenience technologies and interactive features, such as technology corners, Smart wayfinding, digital streetscaping and public art, Smart urban furniture, and more. Also ensure St. Albert's Community Design Principles emphasize the seamless blending of technology with the natural and built environment.	Not Started, Future Project	2019 or later	Future Requirement(s) TBD	Approve Future Policy Amendments and Resources, if Required
E.1.2 Event Showcases	P. 82	Low	Local Collaboration, Industry Engagement, Ongoing Administrative Effort	Work with local organizations and groups to add Smart City technologies and concepts into complementary festivals, competitions, productions, and other events. For example, the International Children's Festival could incorporate new trends in youth devices and play, Grow St. Albert's Pecha Kucha Nights could feature Smart City themes, the local Lifestyle Expo could have a section dedicated to emerging technologies and Smart Home demonstrations, and more.	Pending Capacity	2017 or 2018	Requirements Under Review	Approve Future Resources, if Required
E.2.1 Emergency Vehicle Priority & Mobile Info	P. 83	High	Capital Project	Equip emergency vehicles with technologies to facilitate adaptive priority at intersections and mobile operational information. A Capital Charter is also proposed for 2017/2018 that would continue to support the implementation. Efforts connected in part to the extension of a municipal area network (strategy A.1.1), which would support better data transmission, and to progress by regional partners on broader EMS priorities.	Some Priority Systems Complete, Some Pending Resources and Regional Progress	2016 - 2018	2017 Capital Charter (FIRE-010) for Traffic Pre-Emption System	Approve Resources
E.2.2 Analytical Risk Assessments	P. 84	High	Program Expansion, Ongoing Administrative Effort	Enhance property risk assessment with analytics to prioritize fire and other types of property-based inspections, with a goal of efficiency and better service/outcomes. This has application for Fire Services, Planning and Development, Assessment Services, Utilities, and more. Efforts connected in part to the improvement of available data, data systems, and analytical capacity.	Pending Capacity	2017 or 2018	Dependent on Staff Capacity	Approve Future Resources, if Required
E.2.3 Crime Analytics & Surveillance	P. 85	High	Capital Projects, Program Expansion, Ongoing Administrative Effort	Utilize social data analytics, online reporting, and integrated sensors / surveillance technologies to address local incidents and support local RCMP efforts. Some civic surveillance has been used for years, and expansion would be connected to RCMP or corporate security priorities, the expansion of building access systems, and other Smart City efforts such as the extension of a St. Albert Sensor Array (strategy F.1.1), improved analytical capacity (F.2.1), and improved data capacity (IM.3 and F.3.3).	Some Surveillance and Analytics Used for Security, New Efforts Pending Resources	2016	2017 Capital Charter (LEGAL-001) for Facilities Safety and Security; 2017 Business Case for "Support for Business Intelligence Program" Future Requirement(s) TBD	Approve Current Resources, Approve Future Policy Amendments and Resources, if Required
E.2.4 RCMP Pilot Community	P. 87	High	Agreement with RCMP, Ongoing Administrative Effort	Engage the RCMP in an ongoing agreement test and deploy innovative crime prevention and law enforcement technologies in St. Albert. While the City lacks the authority to require the RCMP to test any specific technology within the community, it could agree to serve as a long-term RCMP partner in testing new technologies that align to St. Albert's needs. A formal letter from the Mayor / Council could initiate the inquiry process.	Under Review	2017	Current Staff Capacity	Set Direction, Engage RCMP
E.3.1 Civic e-Services and Mobile Options	P. 88	Medium	Program Enhancement and Ongoing Administrative Effort	Review the City's eService offerings and future needs, as part of the review / update of the ITS Long Term Department Plan, and in alignment to the Smart City Master Plan. A single sign-on capability for online services is also under development. The Smart City Master Plan supports an improvement to both the quantity and quality of eServices and the mobility and personalization of those options.	Multiple e-Services Offered, New Services Pending and Under Review Through ITS Long Term Plan Update	2017	Pending Staff Capacity and ITS Long Term Plan Update Future Requirement(s) TBD	Approve Update of ITS Long Term Plan; Approve Future Resources, if Required
E.3.2 Two-Way Digital Engagement	P. 89	Medium	Program Enhancement and Ongoing Administrative Effort	Complete review of City's public engagement processes, and recommend policy and resources for Council consideration. As part of the program, the City would incorporate stakeholder engagement channels from a Smart City perspective, potentially including new digital participation technologies / systems, gamification elements, social media, and two-way communications.	Some Digital Engagement Channels Offered, New Methods Pending Resources	2016	2017 Business Case for "Public Engagement Online Tool"; 2017 Business Case for "Enhanced Online Communications"	Approve Direction, Approve Resources
E.3.3 Mobile App Development	P. 91	Medium	Plan Amendment, Program Enhancement, Ongoing Administrative Effort	Review the City's mobile offerings and future needs as part of the 2017 review of the ITS Long Term Department Plan, and in alignment to the Smart City Master Plan. The Smart City Master Plan supports a philosophy that the City avoid producing mobile apps where commercially viable options exist - rather, the City should leverage a mobilized website and provide necessary data to developers through a free open data approach (strategy F.3.1).	Some Mobile Apps Offered by City, Others Under Review	2017	Pending Staff Capacity Future Requirements TBD	Approve Update of ITS Long Term Plan; Approve Future Resources, if Required
E.3.4 Master Personalized City App	P. 93	Medium	Capital Project, Ongoing Administrative Effort	Consolidate, within a mobile application and/or tool, a single portal to the City's municipal e-services and other mobile applications. For example, personalized garbage, snow plowing, transit, and other notices could be offered, in addition to much more functionality. This will also be addressed within the planned update of the ITS Long Term Plan. A Business Case has been proposed in 2017 for open data program resources that includes some funding for this concept, and the app would require an improvement of the City's data management systems.	Pending Resources	2018	Some within 2017 Business Case "Open Data Portal"	Approve Update of ITS Long Term Plan; Approve Resources
E.3.5 Resident Digital ID, Smart Card, and CRM	P. 94	Medium	Stakeholder Engagement and Engagement with Potential Partners	Connect with the Government of Alberta and regional partners (who are currently reviewing digital identification priorities and City Smart Card potential) to design a Smart Card approach for St. Albert. This would focus on more responsive and efficient customer service. A review would also be conducted to assess how resident digital identification and a unified customer relationship management system could support the system and ensure residents' needs are met in a holistic manner. To advance this large project, the City would require greater e-Service (strategy E.3.1) and data management (strategy IM.3) capacity.	Discussions with Government and Potential Partners Pending Capacity	2020 or later	Future Requirement(s) TBD	Approve Future Direction and Resources, if Required
F.1.1 Civic Sensor / IOT Array	P. 97	High	Pilot Projects, Future Capital Project(s), Ongoing Administrative Effort	Improve the collection of valuable local data, to support proactive and efficient operations, by installing sensors and other data systems on local infrastructure and many other features within the community. Also prepare procedures to accept data provided by third parties as inputs into the program. Administration plans to conduct small pilots in 2017 and 2018, and potentially bring forward a Capital Charter in 2019 that would provide for a robust management architecture. A 2017 Capital Charter has also been proposed to improve situational awareness in the water and wastewater utilities.	Some Sensors Used, Some Pending IOT Plan and Current and Future Resources	2017	2017 Capital Charter (WATER-005) for Water and Wastewater Systems Future Requirement(s) TBD	Approve Current Resources, Approve Future Policy and Resources, if Required

Action Number and Short Description	Master Plan Rationale	Priority	Output(s)	Summary of Planned Approach	Current Status	Planned Launch or Timing	Resource Requirement	Council Involvement
F.1.2 Building Controls & Automations	P. 100	High	Capital Projects, Ongoing Administrative Effort	Install new Smart building controls and monitoring systems to improve building efficiency and proactive management. A 2017 Capital Charter has been proposed to provide accessible, real time energy data to building operators and the public. Future budget requirements for systems that support automation, proactive maintenance, and cost savings over time are under review.	Some Systems in Place, Others Pending Current and Future Resources	2016	2017 to 2019 Capital Charter (CSS-007) for Smart Building Controls <i>Future Requirement(s) TBD</i>	Approve Current Resources, Approve Future Resources, if Required
F.1.3 Vehicle and Asset Tracking	P. 101	High	Program Expansion, Ongoing Administrative Effort	Integrate vehicle tracking systems across multiple City departments (Public Works, Transit, Emergency Services). These areas currently track the location, speed, and direction of many of their fleet vehicles, in alignment with an approved City policy. A review will be conducted to assess future vehicle and mobile asset tracking, and when the data can be offered to the public through open data sets or online map features. For example, a "where's my plow" information system for residents could be included. Future funding requirements to expand systems to other units are under review.	Some Tracking Systems Used, Some Pending Review	2016	<i>Future Requirement(s) TBD</i>	Approve Future Resources, if Required
F.2.1 Analytics Capacity & Alignment	P. 102	Medium	Program Expansion and Ongoing Administrative Effort	Expand the City's analytics capacity and program, and define projects, processes, policies and tools to promote a culture of data-based decision making. A Business Case has been proposed that adds capacity in the City's analytics / business intelligence program, and this is closely associated with the City's business intelligence program (strategy F.2.2) and related Business Case as well.	Program Established, Requires Additional Resources	2016	2017 Business Case for "Support for Business Intelligence Program"	Approve Current Resources, Approve Future Resources, if Required
F.2.2 Business Intelligence Platform	P. 104	Medium	Program Expansion and Ongoing Administrative Effort	Identify business intelligence support systems and requirements, and enhance the City's ability to collect and communicate its data (internally and externally) in a more effective manner. Also enhance support for the City's ability to monitor the overall health of the organization through performance measurement and public communication. A Business Case has been brought forward to enhance corporate performance measurement, and this is closely associated with the City's analytics capacity (strategy F.2.1) and related Business Case as well.	Program Established, Performance Management System Selection Underway, Requires Additional Resources to Advance	2016	2017 Business Case for "Corporate Performance Measurement Program"	Approve Current Resources, Approve Future Resources, if Required
F.3.1 Open Government & Data Policy	P. 105	High	New Policy	Develop a Council Policy articulating St. Albert's open city / open government philosophy, based on the principles of open access, open information, and open data. Data would be 'open by default'. This would form the foundation of the City's open data program, if approved. A related business case has also been proposed to launch the City's open data program (strategies F.3.2 and F.3.3).	Policy Under Development	2017	<i>Current Staff Capacity</i>	Approve Open Government Policy
F.3.2 Data Descriptions & Outreach	P. 106	High	New Program Supports and Outreach, Ongoing Administrative Effort	Produce an inventory to identify, describe, and classify the City's available spatial and non-spatial data sets. Inventory will communicate what data the City has opened, what it hasn't, and why. As the number and variety of public-facing open datasets published increases over time, such an inventory will become increasingly important. A 2017 Business Case has been proposed to launch the City's open data program, which this work would be a part of.	Pending Resources	2017	Within 2017 Business Case "Open Data Portal"	Approve Resources
F.3.3 Open Data Portal & Displays	P. 107	High	New Program, Ongoing Administrative Effort	Develop an open data portal that will showcase civic data free to public consumers, with a corresponding internal portal that will provide access to data sets in support of administrative data requirements and decisions. Data sets will continue to be developed and added over time, subject to specific review and approval processes that minimize risk. Public displays to show visualizations and data streams would be added over time based on need and budget capacity. A 2017 Business Case has been proposed to launch the City's open data program, which this portal would be a part of.	Pending Resources	2017	Within 2017 Business Case "Open Data Portal"	Approve Resources
F.4.1 Requests for Innovation	P. 109	Low	Internal Policy and Process Change	Incorporate 'requests for innovation' into the City's purchasing policies and related processes, where appropriate, to improve flexibility and identification of unknown or non-conventional solutions. Requires a process to assess which purchases apply, and a change in approach to ensure that these generally occur before budget development and formal tendering processes.	Some Efforts Underway, Purchasing Review Pending	2017	<i>Current Staff Capacity</i>	Approve Future Resources, if Required
F.4.2 Supplier Account & CRM	P. 110	Low	Requirements Review	Review options relative to a unified supplier account and relationship system that supports procurement and vendor management in the most efficient and effective manner. This is expected to be a longer term initiative.	Not Started, Future Project	2019 or later	<i>Future Requirement(s) TBD</i>	Approve Future Resources, if Required
F.5.1 Smart City Operations Centre	P. 111	Low	Requirements Review, Project Scope Review	Consolidate transportation management, emergency operations, security oversight, asset tracking and controls, and other municipal operations within a Smart City control centre. This is a larger initiative that would require a stronger operational foundation and reviews of potential partnerships, shared infrastructure, data sharing agreements, and more. Could also be connected to the construction of future municipal facilities, such as Fire Hall 4 or a new Civic Administration Building.	Not Started, Future Project	2023 or later	<i>Future Requirement(s) TBD</i>	Approve Future Resources, if Required
F.5.2 Community Data Hub	P. 112	Low	Requirements Review, Partner Engagement	Discuss partnerships to establish a hub for community data as an extension to the City's own open data program and regional connections. This would provide a centralized location - a "one-stop shop" - for local data on health, education, transportation, environment, social, and other sources. Negotiations on long-term regional protocols and data sharing agreements would be required. Efforts would be largely be connected to the expansion of the City's open data program (F.3.3) and success in regional open data initiatives.	Pending Open Data Program Launch, and Partnership Discussions	2020	<i>Future Requirement(s) TBD</i>	Approve Required Agreements and Approve Future Resources, if Required
IM.1 Ongoing Smart City Governance	P. 115	High	New Internal Committee, Ongoing Administrative Effort, Steering Committee Alignment	Launch an administrative Smart City Committee that will align and advance multiple internal efforts and transformation priorities. Externally, Council did not support the creation of a public advisory committee on Smart City matters. Administration will ensure Smart City input to existing Council committees as required.	Council Direction Received on Steering Committees, Administrative Committee Pending Launch	2017	<i>Pending Staff Capacity</i>	Provide Direction When Required
IM.2 Financial and Personnel Supports for Smart City Advancement	P. 116	High	Sufficient Resources for Smart City Advancement	Bring forward business cases and capital charters as required to advance the Smart City program. Administration current has 1.0 FTE working on Smart City priorities (among other responsibilities), and has submitted a 2017 Business Case for additional junior support, summer student capacity, and base program funding. The Business Case supports this and a variety of other priority projects within this implementation plan.	One FTE Available, Program Funding and Additional Resources Required to Advance	2017	2017 Business Case "Smart City Supports" <i>Future Budget Requirement(s) TBD</i>	Approve Current Resources, Approve Future Resources, if required

Action Number and Short Description	Master Plan Rationale	Priority	Output(s)	Summary of Planned Approach	Current Status	Planned Launch or Timing	Resource Requirement	Council Involvement
IM.3 Corporate Technology Foundation and Modernization	P. 118	High	Multiple Capital Projects, Ongoing Administrative Effort	Work to improve the City's modern technology foundation, particularly to manage multiple remote devices and ensure that core systems work as intended. This will include multiple priorities over time, such as system upgrades, digital workplace supports, secure wi-fi services in civic facilities (by 2020), cloud-enabled systems, workflow automation, GIS central databases, corporate data warehousing, and more. An update to the ITS Long Term Department Plan is scheduled for 2017, which will reference these elements. Multiple Capital Charters have been aligned to support this strategy.	Some Initiatives Underway, Some Pending Resources	2016	2017 Capital Charter (LEGIS-005) for Census Technology, Annual Capital Charter (ITSV-001) for Office Automation, Annual Capital Charter (ITSV-002) for Office Systems Replacement, 2017 Capital Charter (ITSV-010) for Rec Mgmt Software, and Capital Charter (FIRE-022) for Fire Dispatch System <i>Future Budget Requirement(s) TBD</i>	Approve ITS Long Term Plan Update, Approve Current Resources, Approve Future Resources, if Required
IM.4 Technology Coordination, Interoperability and Scalability	P. 119	High	Ongoing Administrative Effort	Continue to ensure that the core Smart City requirements are embedded in project planning. Smart City technologies within the City must be viewed as part of a bigger, integrated system. An update to the ITS Long Term Department Plan is scheduled for 2017, which will reference specific direction, complementing the Smart City Master Plan. This includes topics such as online services, reduction of fragmentation, mobile applications, unified communications, privacy, security, GIS priorities, data architecture, digital workplace supports, interoperability and other standards, and more.	ITS Plan Update Underway	2016	<i>Pending Staff Capacity</i>	Approve ITS Long Term Plan Update
IM.5 Change Management Support	P. 120	High	Ongoing Administrative Effort	Improve, over time, Administration's capacity to support change efforts, including major technology initiatives. Efforts would include training, tools, and/or personnel resources. The use of an administrative Smart City Committee (strategy IM.1) will also assist in this area.	ITS Plan Update Underway	2016	<i>Requirements Under Review</i>	Approve Future Resources, if Required
IM.6 Government Collaboration, Standards & Funding Support	P. 121	High	Program Expansion, Ongoing Administrative Effort	Work with other municipalities and orders of government to advance St. Albert's interests, share information, pursue joint projects and new/dedicated funding supports (such as provincial and federal Smart City programs, and project specific supports around broadband and other priorities), identify common Smart City standards or benchmarks, and actively contribute to provincial and federal policy conversations.	Some Advocacy and Initiatives Underway, Some Pending Capacity	2016	<i>Current Staff Capacity</i>	Engage in Advocacy Efforts, Approve Future Resources, if Required
IM.7 Municipal Fund for Projects and Partnerships	P. 122	High	Requirements Review, Ongoing Administrative Effort	Identify required funding to support quicker adoption of small and low-risk innovation projects within Administration, partnered projects and testing, research reviews, and resources for a living lab program. A Business Case is being reviewed for 2018. Efforts partially dependent on the City's advancement of its corporate innovation (strategy A.3.1) and Living Lab (strategy B.4.1) programs.	Under Review for 2018	2018	<i>Requirements Under Review</i>	Approve Future Resources, if Required