

## SRMSC Redevelopment Initiative - Pathfinder Overview

**Background and Introduction.** In April, 2010, the team comprised of Cavalier County Job Development Authority (CCJDA), University of North Dakota (UND) and SeaTec completed the SRMSC Strategic Plan. The Plan defines a detailed ten-year roadmap for evolving the former Army base near Nekoma into a world class technology, educational and historical preservation complex – with the primary activities oriented around unmanned aircraft systems (UAS) research and flight testing. Redevelopment and operations of the site will be accomplished with financing obtained from a combination of local, state and national government sources, plus commercial business partners.

The period of time commencing with completion of the SRMSC Strategic Plan, and extending through formal agreement on terms for property ownership transfer from the Federal government to the local owner is designated the “Pathfinder” phase. During Pathfinder, the focus of the initiative will expand beyond SRMSC details to include essential regional and state-wide coordination, communications, strategy development, consensus building and selective outreach beyond the State. The motivation behind launching Pathfinder now is to move the SRMSC Redevelopment initiative forward as vigorously as funding will allow, but also while ensuring that this occurs in the context of a larger, evolving, regional/statewide UAS strategy.

The Pathfinder activities are organized into four distinct, but interrelated, areas:

- Civil Engineering / Site Redevelopment
- Airspace Access Advocacy
- Stakeholder Outreach Communications
- Project Management and Operations

The overall SRMSC Redevelopment Initiative is referred to herein as the “Project.” During Pathfinder, CCJDA, UND Aerospace, and SeaTec representatives will continue to operate as a unified team (the “Core Team”). CCJDA and UND will provide strategic guidance, Project oversight and policy decisions; SeaTec will perform the majority of detailed tasks. A similar division of roles and responsibilities was very effective and efficient during the study phase that produced the SRMSC Strategic Plan.

Although the Project will operate as a not-for-profit public entity, the CCJDA and UND contemplate working together in a manner that is similar to a commercial “start-up” business, with a goal of establishing a business culture that will prevail long after Pathfinder into the subsequent Project phases. Key aspects of the culture include: modest staffing levels, very focused objectives and spending, flexible and highly responsive team, each team member being expected to perform multiple roles, and avoidance of non-critical overhead functions.

**Civil Engineering/Site Redevelopment.** The objectives of this task are to: refine infrastructure redevelopment priorities, expense forecasts and related timelines; qualify and select a redevelopment partner; and, initiate detailed civil engineering design efforts. For use in the Strategic Plan, the Core Team prepared preliminary forecasts of necessary infrastructure refurbishment and construction for each building and the roads, parking lots, utilities and common areas. During Pathfinder, the Core Team will engage with several civil engineering and construction firms to refine the infrastructure redevelopment expenses and obtain inputs from these firms related to the timing and logical grouping of the various construction jobs.

The Core Team plans to accomplish redevelopment partner evaluation and selection during the first three months of Pathfinder, with subsequent detailed engineering efforts to follow. The redevelopment partner is envisioned to be a commercial firm that possesses two essential capabilities: a significant track record of success in implementing design/construction/refurbishment efforts on the scale envisioned for SRMSC; and the willingness and resources to invest in the Project, thereby by having "skin in the game" with respect to ultimate Project success. On behalf of CCJDA, SeaTec will organize and conduct a competition between several firms for the role of becoming the redevelopment partner. SeaTec will execute this activity using "best practices" for such competitions in the aerospace sector - to ensure fairness, transparency and results that serve state and local public interests. This approach is consistent with the North Dakota Century Code and the CCJDA By-Laws.

Following selection of the redevelopment partner ("the Partner"), focus will turn to overall site level design and initiating detailed design on the Community Center upgrades. This effort will be a combination of "community planning" type tasks and conventional civil engineering. The Partner will prepare a detailed time-phased land and facilities use plan that balances potentially competing priorities for building refurbishment, UAS operating surfaces construction, technology park and historical preservation/interpretation. The Partner will also prepare updated refurbishment plans and cost estimates for each building and public space. Finally, the Partner will prepare detailed layouts, designs and cost estimates for the three UAS operating surfaces (two runways, one launch and recovery area). The Partner will conduct reviews of its plans with CCJDA, UND, SeaTec and Commerce, and will conduct public meetings to communicate the plans and obtain public input. Assuming adequate funding, the Partner will next focus on the Community Center, and will undertake adequate design efforts such that construction can be launched immediately after property transfer.

**Airspace Access Advocacy.** Continued growth and development of the UAS industry in North Dakota, and success of the Project, are contingent upon action by the FAA in the formulation and approval of policy for near and midterm UAS operational procedures that will make increasingly routine UAS flights in designated North Dakota airspace a reality. However, there are fundamental challenges to be overcome -- related to airspace access and regulatory constraints placed by the FAA on UAS flights in the National Airspace System (NAS). At this time, the United States lacks a fully harmonized approach for achieving safe and efficient operations of UAS in the NAS. Currently, the FAA is supporting various NextGen Air Traffic Management "early implementation projects" (EIP) intended to demonstrate safety and provide the scientific basis for future policy changes. Due to its location, as well as the emerging UAS technology base, North Dakota is a prime candidate for such EIPs sponsored by the FAA, and accomplished in coordination with DOD, DHS, Industrial and North Dakota stakeholders. Therefore, the objective of this task is to generate, coordinate and provide technical/operational data for use by Federal decision makers in formulating necessary airspace policy. During Pathfinder, the airspace access advocacy activity is organized into four sub-tasks:

- **North Dakota UAS Airspace Action Plan.** Develop and coordinate a UAS Airspace Action Plan that establishes next steps consistent with national UAS EIP planning currently underway by FAA, RTCA, ASTM, and UAS Inter-agency Executive Committee. Timeline: go-ahead July 2010, Plan complete Nov 2010.
  - Working closely with the stakeholders, SeaTec will organize and facilitate a North Dakota UAS Airspace Access Strategy "Task Force," with the objective achieving a consistent and thoroughly coordinated internal North Dakota UAS strategy, and a moderately specific action plan involving testing and demonstration of both airborne and ground-based UAS capabilities needed for safe, routine and efficient UAS operations. The Task Force will be comprised of state and local government leaders, UND Aerospace Department, and selected stakeholders from private industry.

- Organize, convene, facilitate and document Task Force meetings – both physical and virtual, including preparing “read-ahead” packages; prepare and coordinate internal Task Force decision packages.
  - Develop and coordinate a crisp “white paper” that harmonizes the multiple public and private objectives for UAS activities in North Dakota; this will be accomplished via structured interviews, group discussions, iterative review/markup of the white paper” -- followed by a public comment period. The result will be a signed agreement between key North Dakota stakeholders that documents a consistent and thoroughly coordinated internal North Dakota UAS strategy.
  - Prepare an outline/framework for the action plan that implements the North Dakota UAS Strategy, and coordinate inputs from the Task Force members. Circulate the draft plan for public comment/input. The result will be a moderately specific action plan involving testing and demonstration of both airborne and ground-based UAS capabilities needed for safe, routine and efficient UAS operations.
- Northern UAS Study Group. Establish “Northern UAS Study Group,” chartered by the Federal UAS Inter-Agency ExComm with intent of eventually designating North Dakota airspace as a National Airspace Laboratory for the safe introduction of UAS with piloted aircraft in all airspace. During Pathfinder, this effort will concentrate on defining the concept, framing the Study Group charter and obtaining ExComm concurrence and sponsorship. It is envisioned that the Study Group would kick-off its work in early 2011, with North Dakota participation funded through State Legislature authorizations.
  - NMSU Alliance. Establish a balanced alliance between North Dakota UAS interests and New Mexico State University (NMSU). Likely areas of collaboration include: UAS flight safety evaluation criteria/measurables; UAS airspace operational procedures; industrial relations; academic and training programs, and university research.
  - UAS Pilot Standards. Obtain agreement with FAA for a contract to prepare UAS Pilot Training/Certification standards recommendations, jointly with RTCA & ASTM. The contract would be funded by FAA UAS Program Office (AFS-407). The standards effort would be led by UND with participation from SeaTec, Embry Riddle Aeronautical University, and possibly Kansas State University. Business Development (BD) efforts for this contract to be led by SeaTec with participation by UND and the others. Contract go-ahead assumed to be November 2010.

**Stakeholder Outreach Communications.** The objectives of this task are to develop and deliver essential communications about the Project; and to conduct related outreach to potential customers, tenants, collaborators, policy decision makers and influencers. The approach is to develop and frequently deploy factual, timely and interesting “good news” - enhancing public perception that the Project is real and is rapidly building momentum. The communications and outreach activity will initially: identify key messages, in a “layered” protocol; identify specific communication targets to receive regular status updates and news from Project; identify and prioritize opportunities to communicate with stakeholders; and establish an overall communications tactical plan and timeline.

There are several themes in the Project concept that will resonate with key influencers – rural sustainability, economic impact, jobs, technology and a sustainable economic model. Leveraging existing supporters or potential partners is vital to building support based on the key project messages. Outreach will include canvassing leaders in Washington DC and Bismarck to build broad based awareness and support for the Project.

Deliverables from the communications/outreach activity are, in priority order:

- Slender and concise documents/brochures, using layman's terminology, that highlight the Project objectives, economic impact and benefits - for use in one on one or small group meetings.
- A crisp Power Point presentation that highlights Project's benefits, for use in larger forums.
- Develop an identity, formal name and "branding" for the Project.
- A media kit and associated talking points for use in interviews.
- A Project- specific website that leverages reuse of the other material/studies/photos.
- Talking points for CCJDA and UND use in public forums and in meetings with elected officials, business partners or community organizations on specific topics/issues.
- Advocacy in Washington DC – achieving understanding amongst senior leaders in FAA, DOD and DHS of North Dakota's UAS Strategy, the attendant benefits, necessary commitments and related costs/risks. This will be accomplished by providing visibility of the North Dakota initiative to senior federal government agency leadership, and making appropriate introductions to state leaders. The task will also involve framing the terms of reference for a future UAS early implementation project in North Dakota, and initiating discussions of the EIP between FAA and state officials.

**Project Management and Operations.** The objectives of this task are to accomplish fund raising, establish Project priorities, manage budgets and schedules, formalize relationships, and continuously refine economic projections. The tasks and deliverables include:

- Plan and accomplish fund-raising -- the most important responsibility of the Core Team will be securing the necessary funds to keep the Project viable and moving forward.
- Establish and maintain overall project priorities, task definitions, staff responsibilities, and project schedules.
- Formalize written agreements between various entities on how these entities will work together to achieve Project success. The agreements will probably be in the form of "Memorandums of Intent" (MOI). MOIs are envisioned between CCJDA and UND Aerospace, Grand Forks EDC, Grand Forks BRIC, UND Center for Innovation, the North Dakota Centers of Excellence, New Mexico State University, the Redevelopment Partner and other industrial firms.
- Monitor progress of environmental cleanup of the hazardous materials in the missile silos at Nekoma (note: cleanup is the responsibility of the General Services Administration (GSA).)
- Negotiate terms for transfer of the property ownership from GSA. This task will comprise a combination of "advocacy" generally accomplished by CCJDA and legal expertise accomplished by the CCJDA's legal counsel.
- Refine and update the ten-year Economics Model projections as funding strategies develop and new insights are obtained. A quarterly update cycle, beginning in October 2010 is envisioned. Emphasis will be on funding profiles, debt service and revenue forecasts.

**Funding Requirements and Strategy.** The funding strategy is to solicit and obtain commitments of cash funds and in-kind matches in three "rounds." The first round will allocate local Cavalier County sales tax assessments and a Grand Forks EDC grant as "seed" funding, with matching cash from the State Department of Commerce, and combinations of cash and in-kind from UND and possibly other sources. The second round will use Federal FY 2010 appropriations as the seed, with matching funds from the Redevelopment Partner, local area utility companies, and other industrial firms. The third round will leverage a follow-on grant from the Federal EDA to secure matching funds and carry the Project past Pathfinder.

**Why Now.** The “Red River Corridor” of North Dakota has become one of several very active regions in the United States for unmanned aircraft systems technology development, flight operations, and training. Driven by recent and unprecedented forecast needs from active military, reserve military units, academic, civil and commercial sectors, the documented potential growth opportunities for the nascent North Dakota UAS industry are huge. However, North Dakota is in competition with other regions for UAS –driven growth. The fast-paced evolution of public and private UAS initiatives, and the complex inter-agency issues to be resolved, together mandate that North Dakota stakeholders apply dedicated resources to engage in the details of the UAS strategy development, consensus building and priority setting. North Dakota, in general, and Red River Corridor in particular, will derive significant benefits from engaging a small, high-energy but focused team of senior people with deep UAS knowledge, economic development expertise, and hands-on execution and communications/ coordination skills. The over-arching goal is to position North Dakota as a leader and champion of a world class UAS development and training center of excellence with primary operations in Grand Forks and Cavalier counties.