

Los Alamos Ice Rink Cover Structure

County Council Regular Meeting

Incorporated County of Los Alamos
Public Works Department

June 10, 2025

Project Team

- Brendan Tuning – Ice Rink Manager
- Katherine Hudspeth – Recreation Superintendent
- John McNamara – Design Professional, Wilson & Co.
- Miguel Jimenez – Sr. Project Manager
- Julie Williams-Hill – Public Relations Manager
- Cory Styron – Community Services Director
- Eric Martinez – Public Works Director

Background

- Persistent issues that limit the Ice Rink usability
 - Ice loss to sun load during ice-skating season
 - Sun & rain exposure during summer months
- On-going & future improvements to ice making systems
 - Chiller replacement (in progress)
 - Aging refrigerated floor replacement (coming)
- Programmed funds for chiller, floor replacement and potential cover structure between FY 24 and 26
- Timely opportunity to reassess possibility of adding a cover structure

Planning Phase

- Assembled project team
- Initiated in December 2024
- Collect community's input on support and desired functionality for a cover structure
- Evaluate cover structure and budget alternatives
- Select a cover structure

Selected Cover Structure

Pre-eng. steel structure & rigid roof deck

Mono-sloped frame

Most cost-effective structure

- Complete functionality
- Durable
- Least effort and cost to maintain

OPC: \$900,000 to \$1.5 Million
(+site work cost)



Cover Structure Concept for Los Alamos Ice Rink. The photo shows the Sun Peaks Mountain Resort Ice Rink in British Columbia.

Public Outreach

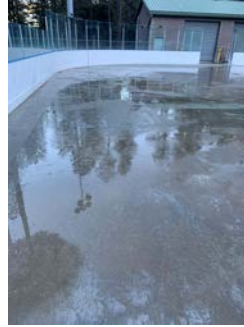
Collect community's input on support and desired functionality for a cover structure

- Listening sessions with user groups
- Webpage with project scope and updates
- Three public meetings at the Parks and Recreation Board
- Two online surveys
- Social networks
- Press releases

Input from Listening Sessions

Los Alamos Derby Dames	Los Alamos Hockey Association
The ice rink is a facility used extensively year round Users ages are 6-years old and up	
Weather reduces and even impedes the use of the ice rink - Loss of skating time	
Floor slippery when wet – fall safety concerns Injury insurance issues Players are exposed to high heat radiation	Ice loss during the beginning and end of season Slushy ice is a fall safety concern Snow accumulation on the ice is not easy to remove
Cancellation of scheduled games, bouts, and tournaments	
Shade/cover structure requirements	
Provide complete coverage of the track – 108'x75'	Total or partial coverage of the floor
Provide cover from sun and rain	Provide cover from sun and snow fall
Maintain the open-air character of the ice rink	Proper lighting for evening/night play
Good for business – Roller Derby and Hockey attract teams from around the region	
No other local venue available for roller Derby	Only NHL size outdoors rink in the Southwest Many teams around the Country want to play here

Input from Listening Sessions



First Public Meeting

1. Parks and Recreation Board January 9, 2025
2. Introduce the Planning & Public Outreach Phase
3. Present a Summary of Previous Efforts
4. Open the First Online Public Survey

First Survey Results

Community's input on support and functionality for cover structure

- Support
 - 575 participants:
 - 76% support cover structure
 - 17% don't support cover structure
 - 7% don't know
- Functionality
 - Year-round coverage including the rink floor, player boxes, and stands.
 - Protection from sun, rain and snow

Cover Structure and Budget Alternatives

- Wilson & Company Engineers and Architects
- Eleven alternatives identified
- Full, partial, and retractable structures considered
- Custom and pre-engineered structures considered
- Steel, timber & hybrid structures considered
- Five structures already used in outdoor ice rinks
- Six structures potentially adaptable to ice rinks

Partial Coverage Structures*

Unobstructed views & limited protection against elements

- Custom option only
- Steel struct. & tensile fabric (light frames)
- Helps with ice melting situation on the north edge of the rink
- Opinion of probable cost: \$1.7 Million to \$2.3 Million
- No protection from rain or snow
- Vulnerable to heavy snow and wind loads
- Cantilevered structure / larger footings
- Fabric wears over time, repairs & replacement increase efforts and cost to maintain
- Reduced cost effectiveness compared to pre-engineered full cover structures

Grandstand cover Villeteaneuse, FR
SMC2 Sport & leisure construction



Sagebrush Community Church
Albuquerque, NM



West Mesa Park and Ride
Mesa, AZ



Custom Structures*

Balanced aesthetics & function

- Floor only or floor plus bleachers and player boxes
- Effective all-season protection from sun
- Effective protection from rain, and snow
- Supports wind and snow loads
- **Opinion of probable cost: \$4 Million to \$6 Million**

Haendel Park Skating Rink, QC
Nordic Structures



Glue-lam timber
High effort & cost to maintain

St. Louis Park Rec. Center, MN
RSP Arch.



Steel / aluminum / glue-lam / fabric
Even greater effort & cost to maintain

Parc des Éperviers, QC
Poirier Fontaine Architects Inc.



Steel & rigid roof decking
Least effort & cost to maintain

* Representative examples

Retractable Structures*

Seasonal adjustable & most expensive alternative

Custom option only

At least 3.3 times the cost of the pre-engineered full cover structure

- Full cover
- Rigid or canvas decking
- Complex mechanisms expensive design & construction
- High effort & cost to maintain
- Opinion of probable cost: \$4 Million to \$6 Million (fabric covering)
- Opinion of probable cost: \$5 Million to \$7 Million (rigid covering)

Retractable rigid roof
Roll-A-Cover Int'l -



Retractable awnings



Vulnerable to heavy snow and wind loads
Challenging to manage snow melt and rainwater running down the cover

Attachment D

Pre-engineered Structures *

Durable & cost-conscious option

- Same functionality as the custom options
- Steel structures and decking composites
- Architectural finish can enhance aesthetics
- Requires least effort & cost to maintain
- Opinion of probable cost: \$900,000 to \$1.5 Million (about 37% of custom option)

Rendering
Sim - Steel Buildings & Dry Kilns
Steelway building systems



* Representative examples

Sun Peak Centre, BC
MAD Arc



Additional Considerations

Site work and footings will require additional engineering analysis

- Limited space available in the parcel
- Varying site elevation contours
- Proximity to canyon wall
- Adjacent to DOE property



Project Team Recommendation

Driven by budgetary and maintenance considerations

Pre-eng. steel structure & rigid roof deck

Most cost-effective structure

- Complete functionality
- Durable
- Least effort and cost to maintain

Gable or mono-slope frame geometry

OPC: \$900,000 to \$1.5 Million
(+ site work cost)



Gable frame



Mono-slope frame

Second Public Meeting

Present recommendation for cover structure

- Parks and Recreation Board April 10, 2025
- Results of the first survey
- Cover structure alternatives
- Second online survey

Second Survey

Collect feedback on the cover structure recommended by project team

Opened from April 10 to the 24 (14 days)

- Q1. Are you a resident of Los Alamos County?
 - Yes
 - No
- Q2. Given the two possible geometries shown above for the recommended cover structure, please select your preferred geometry? (Select one option only)
 - Gable geometry
 - Mono-sloped geometry
 - None
- Q3. If you selected “None”, please explain the reason.
 - Write your answer here
- Q4. What features would make the cover structure more functional or unique to Los Alamos Ice Rink?
 - Write your answer here

Second Survey Results

Questions 1 and 2

- 764 participants
- 94% are Los Alamos residents
- 72% support a cover structure
 - 50% support mono-sloped
 - 22% support gable
- 28% don't support cover structure

Mono-sloped structure
preferred option



Question 3. If you selected “None”, please explain the reason

- 213 of participants (28%)
- Many participants provided multiple perspectives
- Not necessary/preserve rink uniqueness (390)
- Recommended structures not aesthetically pleasing (200)
- Too expensive/other pressing needs (170)
- Prefer a retractable option (80)
- Prefer an indoor ice rink (40)

Question 4. What features would make the cover structure more functional or unique to Los Alamos Ice Rink?

- 410 participants shared their perspectives (53%)
- Many respondents provided multiple perspectives
- Aesthetic enhancements & art (70)
- Amenities for spectators (29)
- Lighting, scoreboard, and sound system (20)
- Sustainable features e.g., solar panels (7)
- Use off-season (21)
- Majority reiterated concerns as in “None” perspectives

Third Public Meeting

PRB issued a recommendation of support for a mono-sloped frame structure for the Ice Rink to County Council

- Parks and Recreation Board May 8, 2025
- Review project team recommendation
- Present results of the second online survey

Project Budget

Funds programmed for Ice Rink Chiller, Floor and Shade Structure

Funding Source	Amount
FY 2024-25 Capital Improvement Projects (CIP) Fund	\$ 6,485,000.00
FY 2026 Capital Improvement Projects (CIP) Fund	\$ 2,000,000.00
Total Funding	\$ 8,485,000.00
Expenses	Amount
FY 2025 Chiller replacement	\$ 2,264,282.70
NMGRT 7.0625%	\$ 159,914.97
Total w/Tax	\$ 2,424,197.67
Contingency	\$ 475,802.33
Total Expenses	\$ 2,900,000.00
Budget Balance	\$ 5,585,000.00

Next Steps

- Request Council direction moving forward
 - Staff recommends Council support further development of a mono-sloped frame cover structure for the Ice Rink in conjunction with the programmed floor replacement
- Further develop scope, cost, and schedule for design and construction

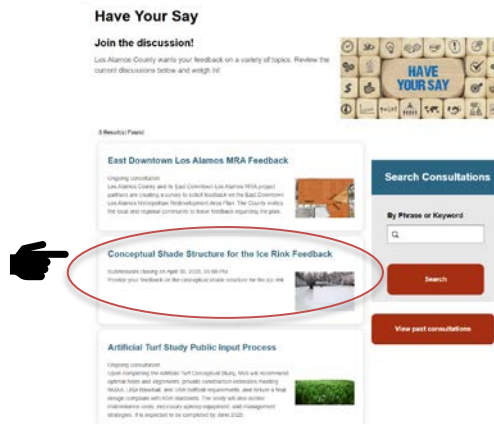
Thank you!

Project webpage & surveys results



<https://losalamosnm.us/ShadeStructure>

Have your say



<https://www.losalamosnm.us/Have-Your-Say>

Contact us

Los Alamos County
Public Works Department



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Questions?



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