

# School Bond 2021



# Bond 2021 List

| Project Title & Description   | Bond amount     | Attendance Area |
|---|-----------------|-----------------|
| <b>Chapman Window Replacement</b> - This 62 year old facility is located in Anchor Point and was constructed in 1958 with additions in 1969, 1978 and 1982. This portion of the facility was constructed in 1982. This project completes the restoration of building envelope that began in 2017. This will result in lower energy consumption and extend the life of the facility.   | \$ 308,580.00   | Anchor Point    |
| <b>Cooper Landing Window Replacement / Siding</b> - The 48 year old facility was constructed in 1972 with an addition in 1982. This project addresses the building envelope including windows and siding that is beyond it's 30 year expected useful life and beginning to rot. This will result in reduced energy consumption and extend the life of   | \$ 227,550.00   | Cooper Landing  |
| <b>District Wide Access Control</b> - All but one school in the district are in excess of twenty years old and were not constructed to address the security challenges schools face today. This project will use technology to further address access control needs to improve the security of our schools, safety of our students and staff.   | \$ 2,000,589.00 | District Wide   |
| <b>District Wide School Building Automation Control Upgrade</b> - Schools across the district have building controls that date back to the mid to late 1980's. These systems have exceeded their 20 year expected life, new parts are not available and systems are no longer supported by the manufacturer. These continuing upgrades are necessary to prevent system failure, improve system monitoring and protect the facilities. This project is a key step in improving efficiency, and reliability to the heating systems.   | \$ 900,000.00   | District Wide   |
| <b>Homer High School Roof Replacement</b> - The existing 35 year old shake roof dates back to 1985, when the facility was constructed. This roof is out of warranty, far in excess of its estimated 20 year useful life and is deteriorating. Attic ventilation has proven to be inadequate, and the internal gutter system is no longer functioning to protect the building from water intrusion. This project will replace the entire roof, improve insulation and provide adequate ventilation. This will result in lower energy consumption and extend the life of the facility.                                  | \$ 8,271,734.00 | Homer           |
| <b>West Homer Elementary – North Wall Sealing</b> - Shortly after construction, the north wall constructed of fluted concrete block started allowing moisture penetration into the building. This has subsequently caused damage to surfaces, and has contributed to mold growth by allowing moisture to penetrate the building envelope. This project would install a secondary wall over the exterior surface to decelerate the driven rain, prevent water intrusion and remediate the damage caused by water intrusion. This will extend the life of the facility and provide a healthier educational environment. | \$ 659,583.00   | Homer           |
| <b>Kachemak-Selo New K-12 School</b> - The school is located on Kachemak Bay and is isolated from the maintained road system. The buildings are in disrepair and are out of code compliance. The Kenai Peninsula Borough received a two-year extension to allow procurement of matching funds by June 2021. The State has appropriated \$10,010,000.00 with a \$5,390,000 local match required for this project. This project constructs a single K-12 school to replace the three existing school buildings.   | \$ 5,390,000.00 | Kachemak -Selo  |
| <b>Kenai Middle School Kitchen / Serving Area Remodel</b> - The 52 year old Middle School was constructed in 1968 and has never been remodeled. To provide food service in its current configuration, three lunch periods are required. This project will enlarge the kitchen and address the serving point to increase the feeding capacity of the kitchen and commons area.   | \$ 750,000.00   | Kenai           |
| <b>Kenai Central High School Building Automation Control Replacement</b> -The 56 year old school was constructed in 1964 with additions in 1967, 1968, 1975 and 1983. The 38 year old heating controls were installed in 1982 and have exceeded their 20 year expected life. The components are failing and the entire system needs to be replaced with updated controls to improve reliability and protect the facility.   | \$ 872,500.00   | Kenai           |

|   |                         |                   |
|---|-------------------------|-------------------|
| <b>Nanwalek Kitchen Expansion / Window Replacement</b> - This 62 year old school is located on the southern coast of Kachemak Bay and was constructed in 1958 with additions in 1977 and 1984. The windows that are being replaced are original to the 1958 construction, the kitchen was part of the 1984 addition. The window replacement portion of the project will replace the failed windows with more energy efficient windows and address damage to the adjacent building envelope. The kitchen expansion will allow for serving of the increased student population and provide relief for a school that has been operating in excess of its capacity since 2009.        | \$ 1,230,214.00         | Nanwalek          |
| <b>Nikiski Middle High School Building Automation Control Replacement</b> - The 34 year old heating controls were installed in 1986. The components are failing and are no longer manufactured. The system has exceeded the 20 year expected life and needs to be replaced with updated controls to improve reliability and protect the facility.   | \$ 593,395.00           | Nikiski           |
| <b>Nikiski North Star Roof Replacement</b> (metal roof) - In the winter of 2019 significant ice damming occurred, causing water to backup and penetrate the 33 year old roof that has exceeded it's 20 year expected life. This caused saturation of the insulation, filled of the soffits with ice resulting in interior building damage. Temporary measures were installed to protect the structure was installation of heat trace along the eaves, to minimize ice damming, operation of the heat trace and loss of insulation has increased the utility cost at this site. This project will replace the damaged and insulation to reduce the operational costs at this site. | \$ 3,422,902.00         | Nikiski           |
| <b>Ninilchik Window Replacement</b> - This section of the facility was constructed in 1950 the project addresses replacement of single pane, failed windows and damage to adjacent building envelope. This will extend the life of the facility and reduce energy consumption.  | \$ 201,017.00           | Ninilchik         |
| <b>Ninilchik Boiler Replacement and Controls</b> - The 62 year old facility was constructed in 1958 with additions in 1962, 1968, 1981 and 1985. The elementary wing was destroyed by fire in 1996 and the final addition was constructed in 1997. This project will replace the boilers that were installed in 1998, with more efficient boilers, improved redundancy and building control and remote monitoring. This project will reduce operational and maintenance costs at this site.   | \$ 413,012.00           | Ninilchik         |
| <b>Seward Middle School Repair 2016 Earthquake Damage</b> - The building was damaged during the 2016 earthquake. Interior and exterior repairs are required to preserve building integrity and are part a seismic retrofit necessary for the protection of this valuable structure.   | \$ 857,314.00           | Seward            |
| <b>Skyview Middle School Building Automation Control Replacement</b> -This school houses the middle school students for the Soldotna area as well as River City Academy. The 33 year old heating controls were installed in 1987 have exceeded their 20 year useful life. The components are failing and the system needs to be replaced with updated controls to improve reliability and protect the facility.   | \$ 591,360.00           | Soldotna          |
| <b>Soldotna School Facilities Renovation</b> - There is currently a feasibility study underway for Soldotna area schools. Following the study recommendations for reconfiguration or structure protection and remediation will be completed at the Soldotna area schools. This project will address the capital needs of these facilities to extend their useful life.  | \$ 2,000,000.00         | Soldotna          |
| <b>Sterling Window / Siding Replacement</b> - This 62 year old facility was constructed in 1958 with additions in 1961, 1963, 1968, 1978 and 1983. This project addresses the east wing of the facility that was constructed in 1961, 1963 and 1978. The windows and siding have far exceeded their 30 year expected life, and have failed allowing water to infiltrate the walls causing additional damage in the facility. This project will extend the life of the facility and provide a healthier educational environment.   | \$ 417,750.00           | Sterling          |
| <b>Tebughna (Tyonek) – Window Replacement</b> - This 54 year old remote facility is located across Cook Inlet from Nikiski, the facility was constructed in 1966 with an addition in 1976. The windows are beyond their 30 year useful life and have failed. This project includes the replacement of the windows and storefront and will preserve the life of the facility and result in operational cost savings.   | \$ 832,500.00           | Tebughna (Tyonek) |
| <b>TOTAL BOND</b>   | <b>\$ 29,940,000.00</b> |                   |

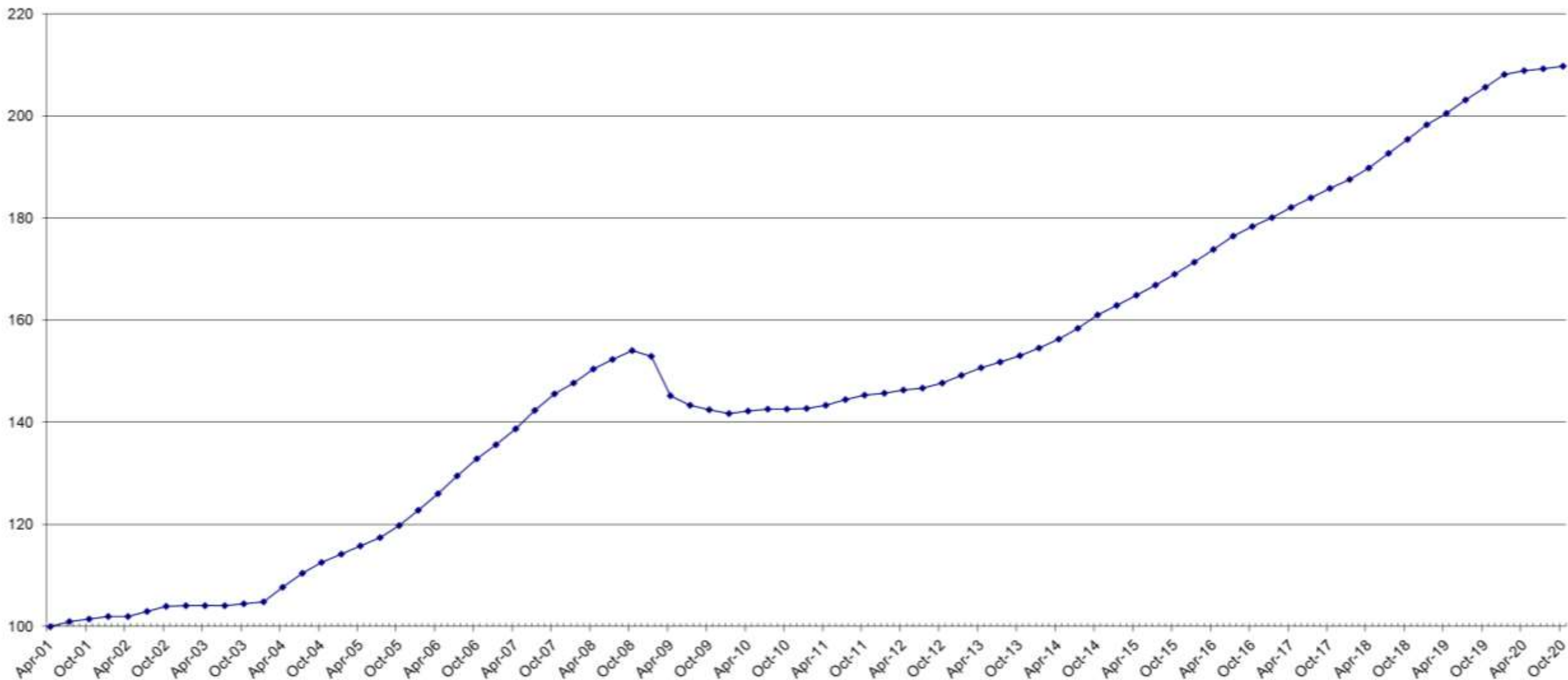
KPBSD current deferred maintence is estimated at 190 million dollars based on renewal replacement schedules

# Potential Bond Items- Removed from Bond List - Funded by KPB

| Project Title & Description  | Attendance Area | Notes              |
|--|-----------------|--------------------|
| Hope DDC Control Replacement – <b>Delayed due to COVID</b>                 | Hope            | 2021 Budget        |
| Mountain View DDC Control Replacement – <b>Delayed due to COVID</b>        | Kenai           | 2021 Budget        |
| McNiel Canyon Boiler Replacement - <b>Completed</b>                        | McNiel Canyon   | 2020 Appropriation |
| Nikiski North Star - DDC Control Replacement – <b>Delayed due to COVID</b> | Nikiski         | 2021 Budget        |
| Susan B. English – Backup Generator – <b>Delayed due to COVID</b>          | Seldovia        | 2021 Budget        |



RLB National Construction Cost Index



Cost of construction has increased and continues to increase – in October 2020 data shows it takes \$209.82 to purchase what cost \$100.00 in 2001 construction

KPB Funding was improving - up from 2.96 in 2017  
but down 1% from 2020 based on property value.



| Rank 2020 | School District                | Score       | % of min recommended |
|-----------|--------------------------------|-------------|----------------------|
| 1         | Anchorage                      | 5.00        | 100.00%              |
| 2         | Galena City                    | 4.87        | 97.40%               |
| 3         | Ketchikan Borough              | 4.42        | 88.40%               |
| 4         | Denali Borough                 | 4.19        | 83.80%               |
| 5         | Fairbanks Borough              | 3.88        | 77.60%               |
| 6         | Lower Kuskokwim                | 3.63        | 72.60%               |
| 7         | Yukon-Koyukuk                  | 3.09        | 61.80%               |
| 8         | <b>Kenai Peninsula Borough</b> | <b>3.08</b> | <b>61.60%</b>        |
| 9         | Southeast Island               | 3.01        | 60.20%               |
| 10        | Nenana City                    | 2.97        | 59.40%               |
| 11        | Northwest Arctic Borough       | 2.93        | 58.60%               |
| 12        | Kodiak Island Borough          | 2.83        | 56.60%               |
| 13        | Pribilof Island                | 2.67        | 53.40%               |
| 14        | Iditarod Area                  | 2.53        | 50.60%               |
| 15        | Juneau Borough                 | 2.44        | 48.80%               |
| 16        | Craig City                     | 2.38        | 47.60%               |

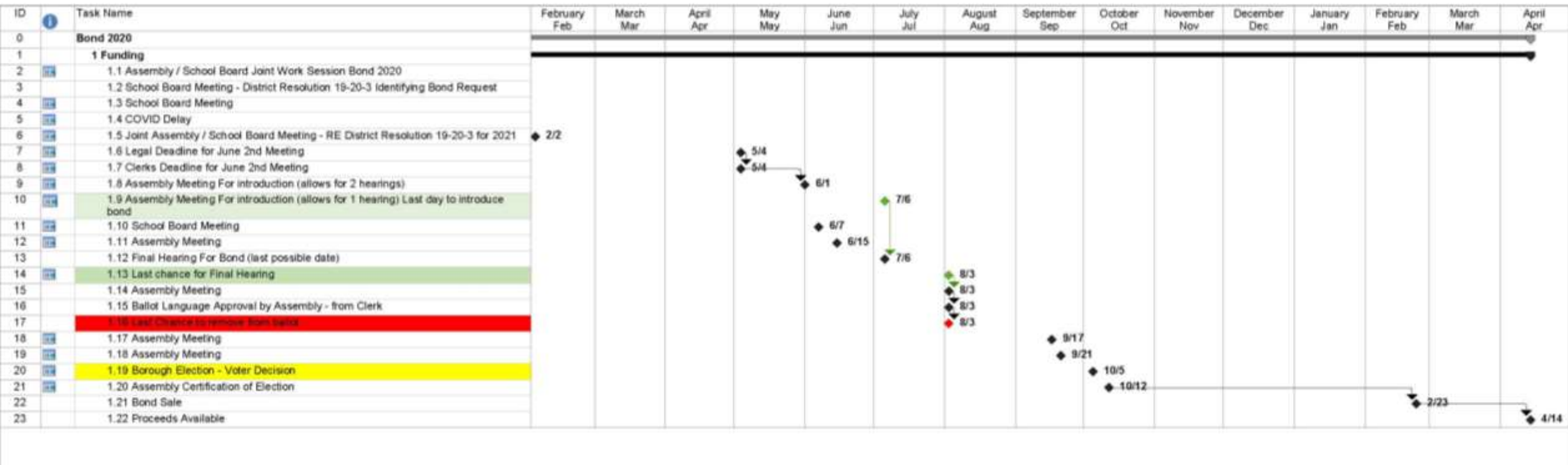
| Rank 2021 | School District                | Score       | % of min recommended |
|-----------|--------------------------------|-------------|----------------------|
| 1         | Anchorage                      | 5.00        | 100.00%              |
| 2         | Galena City                    | 5.00        | 100.00%              |
| 3         | Fairbanks Borough              | 3.62        | 72.40%               |
| 4         | Lower Kuskokwim                | 3.46        | 69.20%               |
| 5         | Ketchikan Borough              | 3.39        | 67.80%               |
| 6         | Lower Kuskokwim                | 3.20        | 64.00%               |
| 7         | <b>Kenai Peninsula Borough</b> | <b>3.03</b> | <b>60.60%</b>        |
| 8         | Southeast Island               | 3.01        | 60.20%               |
| 9         | Nenana City                    | 2.97        | 59.40%               |
| 10        | Denali Borough                 | 2.93        | 58.60%               |
| 11        | Northwest Arctic Borough       | 2.93        | 58.60%               |
| 12        | Kodiak Island Borough          | 2.83        | 56.60%               |
| 13        | Yukon-Koyukuk                  | 2.82        | 56.40%               |
| 14        | Iditarod Area                  | 2.66        | 53.20%               |
| 15        | Mat-Su Borough                 | 2.35        | 47.00%               |
| 16        | Juneau Borough                 | 2.33        | 46.60%               |



Renewal  
Replacement  
Schedule  
Deferred  
Maintenance

| CIP FY 2021                           |           | Building System Appraisal (List taken from Appendix A of EED Preventive Maintenance Handbook) |                |                       | Current Dollar Value of Systems/Components that require Renewal or Replacement during Year<br>(in thousands of dollars) |        |        |        |        |        | Deferred Project | Attach Survey if included in CIP | Total Costs by System (in dollars) |                |
|---------------------------------------|-----------|---|----------------|-----------------------|---|--------|--------|--------|--------|--------|------------------|----------------------------------|------------------------------------|----------------|
| Chapman Elementary 1958               |           | System  | Year Installed | Remain- ing Life Span | Year work req'd   | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |                  |                                  |                                    | Year 6         |
| Name and/or Number                    |           | Site Improvements   |                |                       |   | 2021   | 2022   | 2023   | 2024   | 2025   | 2026             |                                  |                                    |                |
| EED #                                 | 24002001A | Site Utilities  |                |                       |   |        |        |        |        |        |                  |                                  |                                    |                |
| Dist. #                               | 24        | Foundation/Substruct.   | 1958           | -13                   | 2008  | 132    |        |        |        |        |                  | X                                |                                    | \$ 132,007     |
|                                       |           | Superstructure  | 1958           | -13                   | 2008  | 176    |        |        |        |        |                  | X                                |                                    | \$ 175,537     |
| Gross Square Footage 5,808            |           | Exterior Wall System  | 1958           | -38                   | 1983  | 117    |        |        |        |        |                  | X                                |                                    | \$ 117,132     |
|                                       |           | Exterior Windows  | 1958           | -33                   | 1988  | 31     |        |        |        |        |                  | X                                |                                    | \$ 30,973      |
|                                       |           | Exterior Doors  | 1982           | -19                   | 2002  | 6      |        |        |        |        |                  | X                                |                                    | \$ 6,178       |
| Number of Stories 1                   |           | Roof Systems  | 2013           | 12                    | 2033  |        |        |        |        |        |                  |                                  |                                    | \$ 59,757      |
|                                       |           | Interior Partitions   | 1958           | -13                   | 2008  | 68     |        |        |        |        |                  | X                                |                                    | \$ 67,806      |
|                                       |           | Interior Doors  | 1992           | 1                     | 2022  | 21     |        |        |        |        |                  |                                  |                                    | \$ 21,015      |
| Building or Facility Use K-8          |           | Interior Floor Finishes   | 2002           | -4                    | 2017  | 70     |        |        |        |        |                  | X                                |                                    | \$ 70,189      |
|                                       |           | Interior Wall Finishes  | 1998           | 2                     | 2023  |        | 27     |        |        |        |                  |                                  |                                    | \$ 26,707      |
|                                       |           | Interior Ceiling Finishes   | 1958           | -38                   | 1983  | 45     |        |        |        |        |                  | X                                |                                    | \$ 44,858      |
| Replacement Value \$1,287,871         |           | Specialties   | 1993           | 12                    | 2033  |        |        |        |        |        |                  |                                  |                                    | \$ 34,297      |
|                                       |           | Conveying Systems   |                |                       |   |        |        |        |        |        |                  |                                  |                                    |                |
|                                       |           | Plumbing piping   | 1958           | -33                   | 1988  | 45     |        |        |        |        |                  | X                                |                                    | \$ 45,075      |
| NOTES                                 |           | Plumbing Fixtures   | 1992           | 1                     | 2022  | 22     |        |        |        |        |                  |                                  |                                    | \$ 22,087      |
| Natural Gas Heating conversion in '12 |           | Fire Protect./Suppres.  | 1994           | 3                     | 2024  |        |        | 33     |        |        |                  |                                  |                                    | \$ 33,034      |
|                                       |           | HVAC Distribution   | 1978           | -3                    | 2018  | 65     |        |        |        |        |                  | X                                |                                    | \$ 65,037      |
|                                       |           | HVAC Equipment  | 1978           | -13                   | 2008  | 147    |        |        |        |        |                  | X                                |                                    | \$ 147,204     |
|                                       |           | HVAC Controls   | 1978           | -23                   | 1998  | 28     |        |        |        |        |                  | X                                |                                    | \$ 27,689      |
|                                       |           | Electrical Serv./Gen.   | 1978           | -3                    | 2018  | 26     |        |        |        |        |                  | X                                |                                    | \$ 26,208      |
|                                       |           | Electrical Distribution   | 1978           | 7                     | 2028  |        |        |        |        |        |                  |                                  |                                    | \$ 31,488      |
|                                       |           | Electrical Lighting   | 2003           | 7                     | 2028  |        |        |        |        |        |                  |                                  |                                    | \$ 71,992      |
|                                       |           | Special Electrical  | 1978           | -28                   | 1993  | 32     |        |        |        |        |                  | X                                |                                    | \$ 31,617      |
| Facility Cost Index 0.80024608        |           | Equip and Furnishings   |                |                       |   |        |        |        |        |        |                  |                                  |                                    |                |
|                                       |           | Totals  |                |                       |   | 1,031  | 27     | 33     | -      | -      | -                | \$ 1,090,355                     |                                    | Six Year Total |

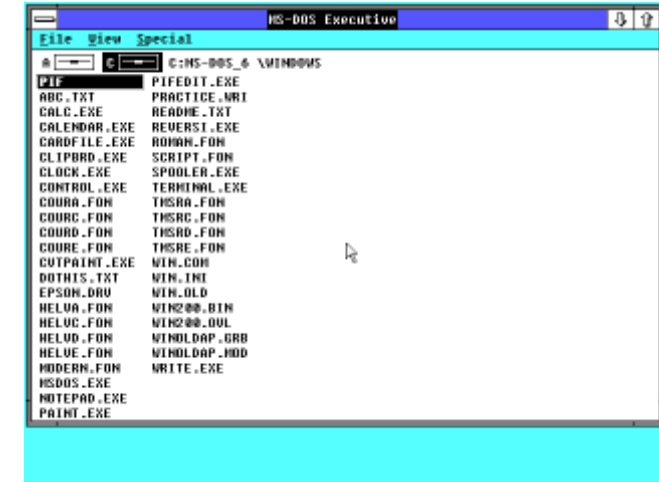
# School Bond 2021 Funding Timeline



Project: Bond 2020  
Date: Tue 1/26/21

|            |  |                    |  |                       |  |                |  |
|------------|--|--------------------|--|-----------------------|--|----------------|--|
| Task       |  | Inactive Task      |  | Manual Task           |  | Manual Summary |  |
| Mile Stone |  | Inactive Milestone |  | Duration-only         |  | Start-only     |  |
| Summary    |  | Inactive Summary   |  | Manual Summary Rollup |  | Finish-only    |  |

# Building Automation System Upgrades – Replacement (DDC)



HVAC Controls have a estimated 20 Year expected Life

Controls are installed during final year of construction – specified year prior

Kenai Central High School – Controls installed in 1982 – 39 years

Nikiski Middle High School – Controls installed in 1986 – 35 years

Skyview Middle School – Controls installed in 1987 – 34 years





# Exterior Closures (Windows & Walls)

Chapman Window / Siding Replacement – 1982

Cooper Landing Window and Siding Replacement – 1972 & 1982

Nanwalek Window Replacement & Kitchen - 1958

Ninilchik Window Replacement – Single Pane Windows - 1950

Seward Middle School - 2016 Earthquake Damage

Sterling Window / Siding Replacement – 1961, 1963 & 1978

Tebughna (Tyonek) - Window Replacement - 1966 & 1976

West Homer Elementary – North Wall Sealing – Wind driven rain infiltration



# School Roofing Replacement

## Homer High School



Shingles broken and sliding out of position.



Shingles curling and cupping.

## Nikiski North Star

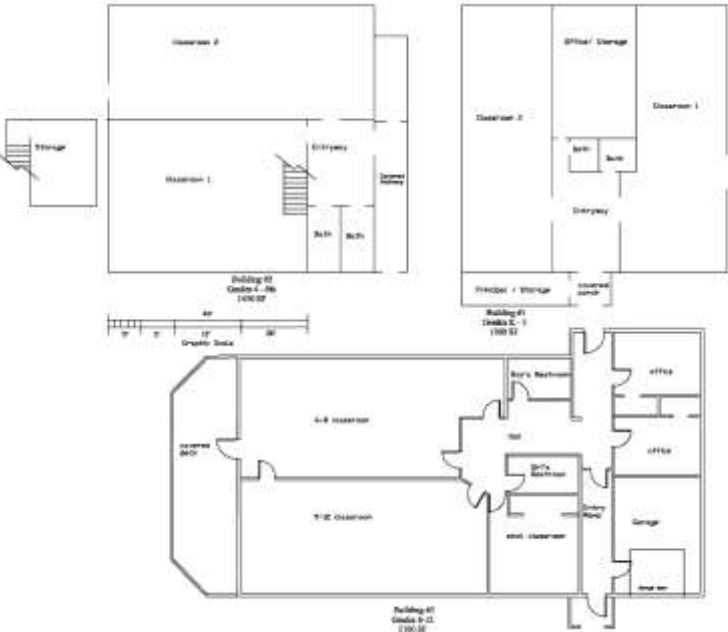




# Building Replacement -

Kachemak Selo

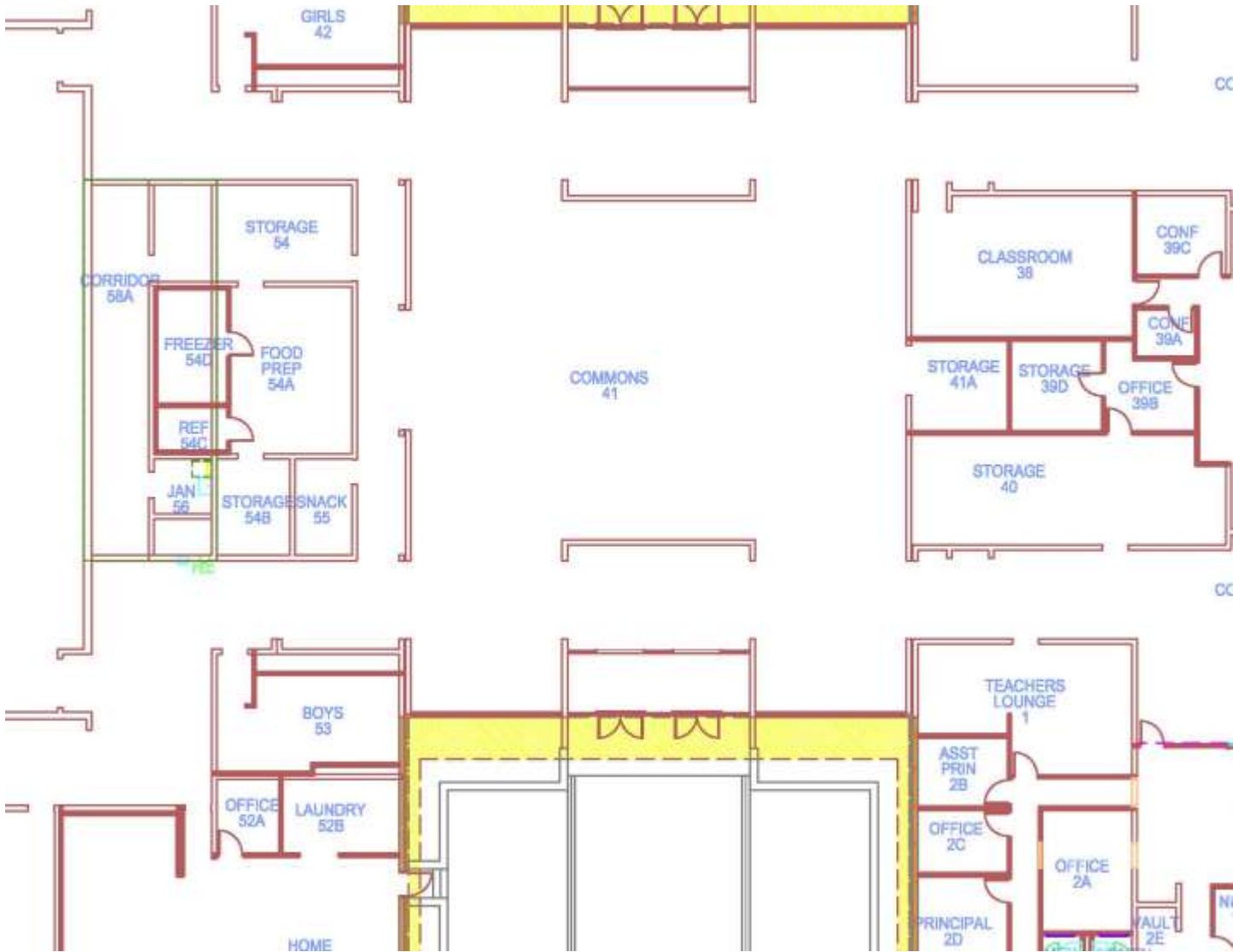
Grant Funded By the Department of Education and Early Development and requires a 35% Local Match



**4 AAC 31.900(27) "geographically separated" means**  
**(A) lacking year-round, publicly-maintained road access to other district schools;** or  
**(B) separated by more than 20 road miles from the closest other school in the district;**

# Operational Improvements

## Kenai Middle School Kitchen / Serving Area Remodel



## District Wide Access Control

### CARD KEY ACCESS - PRIORITY LIST

|        |   |
|--------|---|
| 1      | Sterling Elementary                       |
| 2      | Kenai Alternative / Aurora Borealis       |
| 3      | Soldotna Elementary / Montessori          |
| 4      | Kenai Middle School                       |
| 5      | Nikiski North Star                        |
| 6      | Redoubt Elementary                        |
| 7      | West Homer Elementary / Big Fireweed      |
| 8      | Paul Banks Elementary                     |
| 9      | Kaleidoscope                              |
| 11     | K-Beach Elementary                        |
| 12     | Mountain View Elementary                  |
| 13     | McNeil Canyon Elementary                  |
| 14     | Seward Elementary                         |
| 15     | Skyview Middle School                     |
| 16     | Seward Middle School                      |
| 17     | Soldotna Prep School / River City Academy |
| 18     | Tustumena Elementary                      |
| 19     | Homer Middle School                       |
| 20     | Chapman                                   |
| 21     | Tebughna (Tyonek)                         |
| 22     | Nikiski Middle / High School              |
| 23     | Seward High School                        |
| 24     | Soldotna High School                      |
| 25     | Kenai Central High School                 |
| 26     | Ninilchik                                 |
| 27     | Homer Flex                                |
| 28     | Nikolaevsk                                |
| 30     | Susan B. English                          |
| 31     | Hope                                      |
| 32     | Cooper Landing                            |
| 33     | Nanwalek                                  |
| 34     | Port Graham                               |
| 35     | Moose Pass                                |
| 36     | Homer High School                         |
| 37     | District Offices                          |
| 38     | Warehouse / Connections                   |
| LEASED | Voznesenka                                |
| LEASED | Kachemak Selo                             |
| LEASED | Razdolna Elementary                       |
| LEASED | Little Fireweed Academy                   |



**Cost of the Proposed Bond is approximately 0.28 mils or \$27.80 per \$100,000 of assessed value.**

| Request                                     | Mill required to support request | est cost of proposal | Est \$ property taxpayer will pay to support request<br>per \$100,000 assessed value |
|---|----------------------------------|----------------------|--|
| 40M school bond/20 yr no debt reimbursement | 0.37                             | \$3,100,000.00       | \$36.83  |
| 30M school bond/20 yr no debt reimbursement | 0.28                             | \$2,340,000.00       | \$27.80  |
| 25M school bond/20 yr no debt reimbursement | 0.23                             | \$1,950,000.00       | \$23.16  |
| 5M school bond/20 yr no debt reimbursement  | 0.05                             | \$385,000.00         | \$4.57   |

**The projects will be administered to remain eligible for State Reimbursement, if it becomes available in the future.**

# School Bond 2021



**Total Bond Amount \$29,940,000**

★ District and Community Wide Projects \$ 4,900,589

★ Site Specific Projects \$25,039,411

**19 projects Impacting 38 of our 42 schools**

**Cost of the Proposed Bond is approximately  
0.28 mils or \$27.80 per \$100,000  
of assessed value.**

