

CAPITAL PROFILE REPORT DRAFT

Profile Page 1

| | | |
|---------------|---|--|
| PROFILE NAME: | ALLEY RENEWAL (MEDIUM-HIGH) | UNFUNDED |
| PROFILE | CM-99-4801 | PROFILE STAGE: Entry - CIA CapBud Analy |
| DEPARTMENT: | Integrated Infrastructure Services | PROFILE TYPE: Composite |
| BRANCH: | Transportation Infrastructure | PROFILE MANAGER: Jason Meliefste |
| PROGRAM | | LEAD BRANCH MANAGER: Craig Walbaum |
| LEAD BRANCH: | Transportation Infrastructure | ESTIMATED START: |
| BUDGET CYCLE: | 2019-2022 | ESTIMATED COMPLETION: |

| | | | |
|--------------------------|----------------|------------------------------|----------------|
| Service Category: | Roads | Major Initiative: | |
| GROWTH | RENEWAL | PREVIOUSLY APPROVED: | - |
| 5 | 95 | BUDGET REQUEST: | 203,137 |
| | | TOTAL PROFILE BUDGET: | 203,137 |

PROFILE DESCRIPTION

The Alley Renewal Program outlines a cost-effective, long-term strategy approach to address the renewal and rebuilding of alleys in existing neighbourhoods, and reach a medium-high level of service (Average Condition Index - Grade C+, 15% in F/D Condition, 5% in F Condition) within 25 years. The Alley Renewal Program provides for the renewal of roadway base and paving of existing alleys. This program includes the following major categories: Alley Reconstruction, Alley Upgrade, and Alley Overlay.

PROFILE BACKGROUND

Currently 69% (764 km) of paved alleys require renewal, with an additional 68 km of gravel alleys. Issues such as potholes, water ponding and base failures are common and present significant safety, access reliability and maintenance challenges. Alleys lack a funded renewal program therefore alley renewal only takes place either as a result of underground utility renewal projects or local improvements. These activities are not sufficient to effectively meet the current alley renewal and service level needs.

A funded alley renewal strategy could effectively combine reconstruction and rehabilitation that allows the overall alley network to improve to "Fair-Good (Condition C+) or better" condition within 25 years of 2018 (2019 - 2043).

PROFILE JUSTIFICATION

Alley infrastructure should be maintained in accordance to its asset life cycle as outlined in the City's Alley Investment Model, utilizing a balanced approach of capital improvement techniques (reconstruction and overlay) to maximize asset value and asset life.

Anticipated Outcomes: Sufficient funding levels will allow for the overall condition of alleys to become a "grade C+ or better" in 25 years. Project planning should occur two years prior to alley work to allow for coordination with utilities and the use of longer term contracts to achieve greater value for money.

Urgency of Need: Need to create a predictable funding to meet renewal needs of alleys (issues such as potholes, water ponding and base failures are common) that present significant safety, access, and maintenance challenges. Unpredictable funding levels will impede on the ability to mitigate the effects of rising construction prices and availability during stronger economic times.

STRATEGIC ALIGNMENT

The Way We Move: Well Maintained Infrastructure. Sustainability utilizing recycled materials and newer technologies; Access and Mobility / Health and Safety - interconnected system for efficient movement via various modes.

ALTERNATIVES CONSIDERED

Using life cycle cost/benefit analysis demonstrates that the following alternatives are not as effective to fully funded alley renewal (reconstruction, rehab) program:

Do Nothing/Unfunded Alley Renewal Program - Current approach: In the absence of a funded alley renewal program, alley renewal only takes place either as a result of underground utility renewal projects or local improvements.

Band Aid/Triage Renewal: simple renewal is completed on alleys that currently require more extensive renewal (reconstruction) to bridge the time when funding is available for alley reconstruction.

Reconstruction First/Worse Only approach: Using the City's Alley Investment Model and life cycle/cost benefit analysis showed that effectively combining reconstruction, rehabilitation, and preventative maintenance, the program allows more alleys to receive improvements within 25 years (2019 - 2043), whereas a reconstruction-only program would take many more years to complete at a higher cost.

COST BENEFITS

Require \$20.0 million annually to achieve committed services levels.

Tangible benefits: renewal of aging infrastructure in older neighbourhoods, maximizing service life of alley infrastructure, and long-term cost savings through reinvestment strategies, increase in service levels and customer satisfaction.

Intangible benefits: enhancing attractiveness of neighbourhoods, improving livability of residents.

KEY RISKS & MITIGATING STRATEGY

Utility Conflict/Coordination: provide 2 years of planning before alley construction begins.

Industry/Internal Capacity: Alley construction ramp up over a 4 year period (2019 - 2022) provide time to resource plan.

RESOURCES

Mix of internal/external paving and engineering services. Internal resources evaluation would include: Current internal capacity, Potential re-allocation of design/deliver staff and Operating Services Packages, City Infrastructure Maintenance paving.

CONCLUSIONS AND RECOMMENDATIONS

With alleys being an integral part of the City's transportation network providing access to residents, businesses and industries, an effective alley renewal strategy is needed to ensure the City meets its goals for sustainable and accessible infrastructure.

CAPITAL PROFILE REPORT

PROFILE NAME: **Alley Renewal (Medium-High)**
 PROFILE NUMBER: **CM-99-4801**
 BRANCH: **Transportation Infrastructure**

UNFUNDED
 PROFILE TYPE: **Composite**

CAPITAL BUDGET AND FUNDING SOURCES (000's)

| APPROVED BUDGET | Prior Years | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | Beyond 2025 | Total |
|--------------------------|-----------------|------|------|------|------|------|------|------|------|------|-------------|-------|
| | Approved Budget | | | | | | | | | | | |
| Original Budget Approved | - | - | - | - | - | - | - | - | - | - | - | - |
| Current Approved Budget | - | - | - | - | - | - | - | - | - | - | - | - |

| | | | | | | | | | | | | | |
|--------------------------|---------------------------------------|-----|-----|-------|--------|--------|--------|--------|--------|--------|--------|---------|---------|
| BUDGET REQUEST | Budget Request | - | 100 | 400 | 5,025 | 12,289 | 18,380 | 22,138 | 22,649 | 23,186 | 23,770 | 75,200 | 203,137 |
| | Revised Funding Sources (if approved) | | | | | | | | | | | | |
| | Neighborhood Renewal Reserve | - | 100 | 400 | - | - | - | - | - | - | - | - | 500 |
| | Other | - | - | - | 5,025 | 12,289 | 18,380 | 22,138 | 22,649 | 23,186 | 23,770 | 75,200 | 202,637 |
| Requested Funding Source | - | 100 | 400 | 5,025 | 12,289 | 18,380 | 22,138 | 22,649 | 23,186 | 23,770 | 75,200 | 203,137 | |

| | | | | | | | | | | | | | |
|------------------------------|------------------------------|-----|-----|-------|--------|--------|--------|--------|--------|--------|--------|---------|---------|
| REVISED BUDGET (IF APPROVED) | Revised Budget (if Approved) | - | 100 | 400 | 5,025 | 12,289 | 18,380 | 22,138 | 22,649 | 23,186 | 23,770 | 75,200 | 203,137 |
| | Requested Funding Source | | | | | | | | | | | | |
| | Neighborhood Renewal Reserve | - | 100 | 400 | - | - | - | - | - | - | - | - | 500 |
| | Other | - | - | - | 5,025 | 12,289 | 18,380 | 22,138 | 22,649 | 23,186 | 23,770 | 75,200 | 202,637 |
| Requested Funding Source | - | 100 | 400 | 5,025 | 12,289 | 18,380 | 22,138 | 22,649 | 23,186 | 23,770 | 75,200 | 203,137 | |

CAPITAL BUDGET BY ACTIVITY TYPE (000's)

| REVISED BUDGET (IF APPROVED) | Activity Type | Prior Years | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | Beyond 2025 | Total |
|------------------------------|---------------|-------------|------|------|-------|--------|--------|--------|--------|--------|--------|-------------|---------|
| | Construction | | - | - | - | 4,773 | 11,675 | 17,461 | 21,031 | 21,517 | 22,027 | 22,582 | 71,440 |
| Design | | - | 100 | 400 | 251 | 614 | 919 | 1,107 | 1,132 | 1,159 | 1,189 | 3,760 | 10,632 |
| Total | | - | 100 | 400 | 5,025 | 12,289 | 18,380 | 22,138 | 22,649 | 23,186 | 23,770 | 75,200 | 203,137 |

OPERATING IMPACT OF CAPITAL

Type of Impact:

| Branch: | | | | | | | | | | | | | | | | |
|------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | Rev | Exp | Net | FTE | Rev | Exp | Net | FTE | Rev | Exp | Net | FTE | Rev | Exp | Net | FTE |
| Total Operating Impact | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |