# Public Area Cleanliness Index

Dr. Leslie Rosenfeld
Chief Learning and Development Officer

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# CITY'SVISION

- The City's Vision is to ensure that the City of Miami Beach will be:
  - Cleaner and Safer
  - More Beautiful and Vibrant
  - A Unique Urban and Historic Environment
  - A Mature Stable Residential Community with Well-Improved Infrastructure
  - A Cultural Entertainment, Tourism Capital and International Center for Innovation and Business

  While Maximizing Value to our Community for the Tax Dollars Paid

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# WHATISTHECLEANLINESSINDEX?

- The Cleanliness index is a set of standards that can be used to measure the cleanliness of the City of Miami Beach's public areas.

- The Cleanliness Index provides standards on rating the cleanliness of 4 factors:
  - Litter / Trash
  - Litter / Garbage Cans
  - Organic Materials
  - Fecal Matter

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# WHYASSESSTHECLEANLINESS OFPUBLICAREAS?

- To provide a quantitative measurement to gauge the cleanliness of the City as it relates to the vision statement

- Use the data captured to direct the City's efforts in improving the cleanliness maintenance functions

- Assist the departments in determining what factors affect the cleanliness of the public areas

- Evaluates if different initiatives and service levels are effective in making the public area cleaner

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# CLEANLINESSPROGRAM

- Identified during 2005 Strategic Planning Process
- Developed in response to community input, workshops, and retreats
- Community input- community meetings/focus groups/complaints
- 2005 Community Surveys

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# 2005SURVEY

- Identified cleanliness of streets (commercial areas) and waterways area for improvement

- Cleanliness important quality of life issue

- Cleanliness one change- Make MB better

- Negative perceptions of cleanliness key driver lower value tax dollar paid

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# KEYINTENDEDOUTCOMES

- Strategic Plan accountability through both qualitative and quantitative measures

- Survey data provides qualitative measures (perceptions)

- Cleanliness Index: Objective measurement process and program to assess cleanliness, based on best practice review, nationally and internationally

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# CLEANLINESS INDEX PROGRAM

- Implemented in September of 2005
- Index is a scale from 1 (Extremely Clean) to 6 (Extremely Dirty) used to evaluate four factors:
  - Litter/Trash, Organic Material, Fecal Matter, Garbage Cans
- Photographs taken of unacceptable conditions (3 or worse)
- Assessors conduct cleanliness assessments each quarter

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# CLEANLINESSINDEXPROGRAM

- Public areas assessed: streets, sidewalks, alleys, parks, parking lots, beaches, and waterways
- Stratified sample and frequency (number of assessments conducted at one location each quarter)

| Public Area | Classification | How is the sample selected? | When are these areas assessed? | | | | |
|---|---|---|---|---|---|---|---|
| | | | Weekday | | Weekend | | |
| | | | Daytime | Night | Daytime | Night | Late Night |
| Streets, Sidewalks, Alleys | Entertainment | Random sample | X | X | X | X | X |
| | Commercial (Non-Entertainment) | Random sample | X | | X | X | |
| | Residential | Random sample | X | | X | | |
| Parking Lots | Entertainment | All | X | X | X | X | X |
| | Commercial (Non-Entertainment) | All | X | | X | X | |
| Parks | N/A | All | X | | X | | |
| Beaches | N/A | Random Sample | X | | X | | |
| Waterways | Hotspots | All | X | | X | | |
| | Non-hotspots | Random sample | X | | X | | |

The frequency and sample of the assessments are dependent on the type of public area and its classification

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# PROGRAMRESULTS

- Reported quarterly and compared to previous quarter and with the same quarter from previous year

- Identifies trends and seasonality

- Color indicators used to identify under performing

**Cleanliness Summary for Parking Lots (target = 1.5)**

| Parking Lots | FY05/06 | | | | | FY10/11 | FY11/12 | FY12/13 | | | | | FY13/14 | | | | | % change from prior Qtr | % change from prior FY Qtr |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Q1 | Q2 | Q3 | Q4 | FY Score | FY Score | FY Score | Q1 | Q2 | Q3 | Q4 | FY Score | Q1 | Q2 | Q3 | Q4 | FY Score | | |
| Commercial – Entertainment | 2.02 | 2.27 | 2.33 | 2.00 | 2.16 | 1.74 | 1.65 | 1.43 | 1.50 | 1.40 | 1.77 | 1.53 | 1.54 | | | | | -13.0% | 7.69% |
| Commercial – Non-Entertainment | 2.49 | 2.17 | 2.25 | 2.01 | 2.23 | 1.85 | 1.79 | 1.66 | 1.64 | 1.71 | 1.88 | 1.72 | 1.57 | | | | | -16.5% | -5.42% |
| **Cleanliness Per Factor** | | | | | | | | | | | | | | | | | | | |
| Commercial – Entertainment | | | | | | | | | | | | | | | | | | | |
| Litter/Trash | 2.41 | 2.50 | 2.74 | 2.39 | 2.51 | 2.15 | 1.95 | 1.67 | 1.65 | 1.69 | 2.11 | 1.78 | 1.71 | | | | | -19.0% | 2.40% |
| Organic Materials | 1.95 | 2.06 | 2.38 | 2.05 | 2.11 | 1.73 | 1.81 | 1.40 | 1.52 | 1.51 | 1.97 | 1.60 | 1.71 | | | | | -13.2% | 22.14% |
| Fecal Matter | 1.48 | 1.47 | 1.78 | 1.44 | 1.54 | 1.20 | 1.17 | 1.04 | 1.18 | 1.12 | 1.31 | 1.16 | 1.14 | | | | | -13.0% | 9.62% |
| Litter/Garbage Cans/Dumpsters | 2.22 | 3.06 | 2.43 | 2.14 | 2.46 | 1.91 | 1.68 | 1.66 | 1.67 | 1.27 | 1.66 | 1.57 | 1.61 | | | | | -3.0% | -3.01% |
| Commercial – Non-Entertainment | | | | | | | | | | | | | | | | | | | |
| Litter/Trash | 3.10 | 2.67 | 2.38 | 2.37 | 2.63 | 2.22 | 2.02 | 1.94 | 2.10 | 2.05 | 2.05 | 2.04 | 1.86 | | | | | -9.3% | -4.12% |
| Organic Materials | 2.78 | 2.33 | 2.42 | 2.01 | 2.39 | 1.97 | 2.17 | 1.94 | 1.65 | 2.02 | 2.02 | 1.91 | 1.63 | | | | | -19.3% | -15.98% |
| Fecal Matter | 1.66 | 1.75 | 1.76 | 1.48 | 1.66 | 1.22 | 1.12 | 1.20 | 1.12 | 1.08 | 1.29 | 1.17 | 1.13 | | | | | -12.4% | -5.83% |
| Litter/Garbage Cans/Dumpsters | 2.41 | 1.92 | 2.42 | 2.19 | 2.24 | 1.95 | 1.87 | 1.53 | 1.70 | 1.88 | 2.21 | 1.83 | 1.70 | | | | | -23.1% | 11.11% |
| **Cleanliness Per Time of the Week** | | | | | | | | | | | | | | | | | | | |
| Commercial – Entertainment | | | | | | | | | | | | | | | | | | | |
| Weekday(Monday 8AM - Friday 5PM) | 1.86 | 2.17 | 2.49 | 1.78 | 2.07 | 1.66 | 1.68 | 1.49 | 1.42 | 1.41 | 1.84 | 1.54 | 1.47 | | | | | -20.1% | -1.34% |
| Weekend(Friday 8PM - Sunday 12AM) | 2.14 | 2.37 | 2.03 | 2.43 | 2.24 | 1.84 | 1.66 | 1.38 | 1.60 | 1.40 | 1.60 | 1.50 | 1.39 | | | | | -13.1% | 0.72% |
| Commercial – Non-Entertainment | | | | | | | | | | | | | | | | | | | |
| Weekday(Monday 8AM - Friday 5PM) | 2.59 | 2.06 | 2.29 | 1.88 | 2.21 | 1.84 | 1.77 | 1.63 | 1.60 | 1.80 | 2.11 | 1.79 | 1.64 | | | | | -22.3% | 0.61% |
| Weekend(Friday 8PM - Sunday 12AM) | 2.42 | 2.37 | 2.09 | 2.14 | 2.26 | 1.82 | 1.80 | 1.68 | 1.66 | 1.63 | 1.54 | 1.63 | 1.54 | | | | | 0.0% | -8.33% |

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# PROGRAMRESULTS

| Public Area | FY05/06 FY Score | FY09/10 FY Score | FY10/11 FY Score | FY11/12 FY Score | FY12/13 FY Score | % change from Base FY | % change from Prior FY | % Change from Best FY |
|---|---|---|---|---|---|---|---|---|
| Overall City Score | 2.10 | 1.80 | 1.60 | 1.59 | 1.49 | -29.0% | -6.3% | -6.7% |
| Streets | 2.03 | 1.74 | 1.65 | 1.55 | 1.47 | -27.6% | -5.2% | -5.4% |
| Not including alleys | 1.94 | 1.66 | 1.54 | 1.45 | 1.36 | -29.9% | -6.2% | -6.6% |
| Commercial – Entertainment | 1.95 | 1.69 | 1.55 | 1.44 | 1.37 | -29.7% | -4.9% | -5.1% |
| Commercial – Non-Entertainment | 1.83 | 1.63 | 1.57 | 1.50 | 1.42 | -22.4% | -5.3% | -5.6% |
| Residential | 2.01 | 1.65 | 1.51 | 1.43 | 1.32 | -34.3% | -7.7% | -8.3% |
| Alleys | 2.60 | 1.99 | 1.89 | 1.84 | 1.77 | -31.9% | -3.8% | -3.9% |
| Sidewalks | 2.06 | 1.75 | 1.63 | 1.45 | 1.36 | -34.0% | -6.2% | -6.6% |
| Commercial – Entertainment | 2.04 | 1.77 | 1.64 | 1.43 | 1.37 | -32.8% | -4.2% | -4.3% |
| Commercial – Non-Entertainment | 1.95 | 1.77 | 1.63 | 1.57 | 1.42 | -27.2% | -9.6% | -10.5% |
| Residential | 2.14 | 1.71 | 1.59 | 1.42 | 1.31 | -38.8% | -7.7% | -8.4% |
| Parks | 1.90 | 1.57 | 1.39 | 1.44 | 1.38 | -27.4% | -4.2% | -0.7% |
| Parking | 2.21 | 2.00 | 1.81 | 1.75 | 1.63 | -26.2% | -6.9% | -7.3% |
| Waterway | 2.59 | 2.11 | 1.70 | 1.96 | 1.72 | -33.6% | -12.2% | 1.1% |
| Beach Areas | | | | | | | | |
| Miami Beach Responsibility Only | 1.85 | 1.59 | 1.43 | 1.36 | 1.40 | -24.3% | 2.9% | 2.8% |
| Miami-Dade County Responsibility | 1.93 | 1.63 | 1.48 | 1.42 | 1.46 | -24.4% | 2.8% | 2.7% |

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# PROGRAMRESULTS

- Assistant City Manager conducts cleanliness review meetings with stakeholder departments

- Analyze and discuss results, identify root causes and develop possible solutions

- Costs, impact, effort, and need for reallocation of resources, or new resources considered

- Distributed to the City Commission quarterly

# STAKEHOLDERDEPARTMENTS

- Public Works/Sanitation, Parks, Code, and Parking

- Use quantifiable data to validate need for change in service levels (not anecdotal information)

- Supervisors analyze results with front line staff

- Front line staff use data to identify root causes and determine solutions

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# RESULTSOFTHEPROGRAM

FY 2005/06 to FY 2012/13

- Overall city cleanliness score improved by 29%

- Streets and sidewalks scores have improved by 27.6% and 34.0% respectively

- Parking lots scores improved by 26.2%

- Waterways scores improved by 33.6%

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# RESULTSOFTHEPROGRAM

Community Satisfaction Survey FY 2005/06 to FY 2011/12

- In 2005, 62% of residents rated the cleanliness of streets in neighborhoods as excellent or good compared to 74% in 2012, a 19% increase
  - North Beach residents rated street cleanliness 55% in 2005 and 70% in 2012, a 27% increase and South Beach/Belle Isle: 56% in 2005 and 76% in 2012, a 38% increase
- In 2005, 50% of businesses rated the cleanliness of streets in business areas as excellent or good compared to 62% in 2012, a 24% increase
  - South Beach/Belle Isle businesses rated street cleanliness 41% in 2005 and 57% in 2012, a 39% increase

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# RESULTSOFTHEPROGRAM

- Waterway cleanliness
  - Business rating improved overall, especially in Mid-beach, which improved overall by 20.4%
  - Resident ratings also improved 16.3% from 2005, with South Point and Condo Corridor in 2012 rating cleanliness in canals/waterways as excellent or good at 65% and 61% respectively

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# PROGRAMIMPLEMENTATION

- Developing program comprised of time spent by staff and staff holder departments

- One time cost (FY05) totaled approximately $7,300 and $600 for equipment)

- FY10 upgrade automation monthly cost $300 for five Blackberry

- FY13 enhancement to include appearance index cost $20,000 for equipment and additional staff time

- Recurring costs approximately $5,000 annually for staff time and Blackberry usage

- Admin time available for employees for after-hours assessments

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# PROGRAMIMPLEMENTATION

- FY07 1.8 million budgeted for cleanliness service enhancements
  - Expand sanitation services on entertainment streets and sidewalks from 5 to 7 days/nights per week
  - Added an entertainment shift from 3 a.m. to 11 a.m.
  - Expand litter control in alleys citywide
  - Enhanced service levels for city parking lots
  - Add roving litter squads in Mid-beach and North Beach
  - Enhance beach cleanliness- addition of new sand sifting equipment
  - Outsourcing of waterway cleanliness
- Current enhancements
  - $115,000 increased pressure cleaning (weekly on Washington,

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# PUBLICAREAAPPEARANCEINDEX

- Program is being expanded to include a public area appearance index, assessors not only assessing cleanliness, but overall appearance of public areas, including landscaping

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# ADAPTABLE

- Program can be adapted for use in other cities
- City must identify what factors drive satisfaction of their customers for area being assessed
- Factors identified through best practice research and discussion with stakeholder departments
- City Manager or Chief administrator support critical success of the program

# ADAPTABLE

- Maintain an unbiased approach to gathering the data

- Employee from departments not involved in the cleanliness program are assessors

- City Manager requirement for departments not involved in cleanliness to provide employees to conduct assessments each quarter

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# ASSESSING STREETS, SIDEWALKS, PUBLIC RIGHT-OF-WAYS, ALLEYS, AND BEACHES

# INDEXFORSTREETS,SIDEWALKS,RIGHT-OF-WAYS, ALLEYS,PARKS,PARKINGLOTS,ANDBEACHES

The following index is used to rate and provide a score for the cleanliness of a street, sidewalk, right-of-way, alleys, parking lots, and beaches.

| Index | Litter/Trash | Litter / Garbage Cans | Organic Materials | Fecal Matter |
|---|---|---|---|---|
| 1 Extremely Clean | ▪ **No litter** and/or **debris** on **entire** block face. | ▪ Can is in **good** working order and none are **no more than 3/4 full.**<br>▪ Can is in a **clean** condition **free of items**, such as stickers, graffiti. | ▪ **Isolated** instances of **small** fresh organic material, such as leaves, branches, etc., cover the paved area.<br>▪ **No large** organic material, such as tree limbs or palm fronds on the ground. | ▪ Fecal matter is **not** visible. |

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# 1-EXTREMELYCLEAN

| Index | Litter/Trash | Litter / Garbage Cans | Organic Materials | Fecal Matter |
|---|---|---|---|---|
| 2 Clean | ▪ **Isolated** pieces of litter on the entire assessed area. **The area is not void of litter**, but may contain an isolated incidence of litter. | ▪ Can is in **good** working order and none are **no more than 3/4 full**. There is **isolated** piece of **trash outside** of the can.<br>▪ Can is in a **clean** condition free of items, such as stickers, graffiti. | ▪ **Less than 10%** of a 10 step distance paved area is covered by **small organic materials**, but occurring **no more than 10%** of the entire assessed area. **If occurring in more than 10%** of the entire assessed area, then **add 1 point**.<br>▪ **No large** organic material on the ground. | ▪ **Past residue** of fecal matter. It seems that an attempt was made to clean the fecal matter, but residue was left behind. |

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# 2-CLEAN







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| Index | Litter/Trash | Litter / Garbage Cans | Organic Materials | Fecal Matter |
|-------|--------------|-----------------------|-------------------|--------------|
| **3 Somewhat Clean** | ▪ **Small to moderate** amounts of litter. In a 10 step distance the litter accumulation should account to **less than 10 small pieces or 2-4 pieces of large litter**, but occurring in **no more than 10%** of the entire assessed area.<br>▪ If the **litter** density occurs between **10-25% of the entire area, then add 1 point.**<br>▪ If the litter density occurs **more than 25% of the entire area**, then **add 2 points**. | ▪ **Can is functioning**, but is **full with trash**, which can be seen from the **eye level**. There is no litter above the rain guard. There is some residue from past garbage.<br>▪ Can is in a clean condition, but may have **one small isolated instance of a sticker or graffiti**, which the eye is not drawn to it. | ▪ **Between 10% - 30%** of a 10 step paved area is covered by organic materials, but occurring in **no more than 10% of the entire assessed area.** If occurring in **more than 10%** of the entire assessed area, **then add 1 point.**<br>▪ **Between 1 and 3 pieces of large organic materials** is on the ground.<br>▪ **Isolated case** of organic material accumulation caused by **standing water and poor drainage.** | ▪ <u>**One**</u> **instance of fecal matter** is present on the public area. |

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1 instance of large organic material



1 Instance of Fecal Matter



Between 10-30% of a 10-step paved area is covered with organic material



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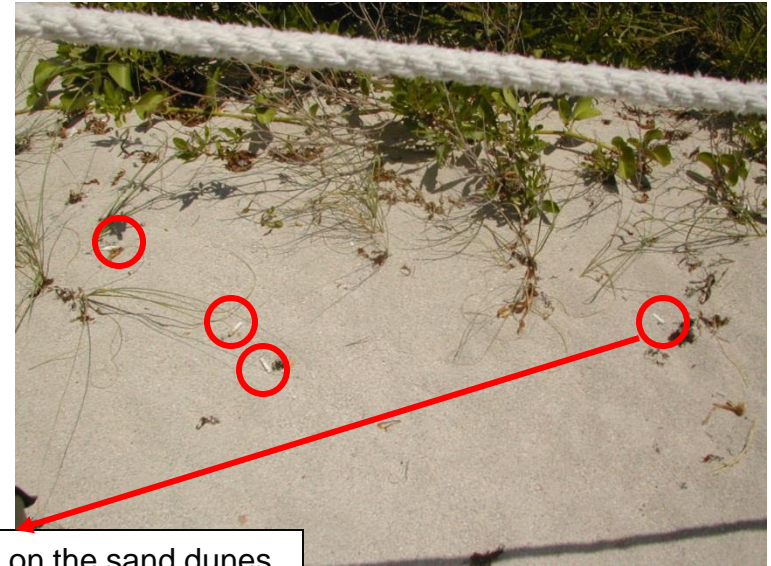
# 3-SOMEWHATCLEAN



There is small to moderate amount of litter. In a 10 step area, there are less than 10 small pieces or 2-4 pieces of large litter.



Sea oats located on the sand dunes should not be rated against the index for organic material. The organic materials that should be rated is sand on paved areas, leaves, seaweed, etc.

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| Index | Litter/Trash | Litter / Garbage Cans | Organic Materials | Fecal Matter |
|-------|--------------|----------------------|-------------------|--------------|
| **4 Somewhat Dirty** | ■ **Consistently scattered trash**. In a 10 step distance the trash accumulation should account **to more than 10 pieces of small litter or over 4 pieces of large litter occurring** in no more than 10% of the entire assessed area.<br>■ **If the litter density occurs between 10-25%** of the entire area, then **add 1 point** from the rating scale.<br>■ **If the litter density occurs more than 25%** of the entire area, then **add 2 points** from the rating scale. | ■ **Can is full** and there is **trash above the rain guard**. In some cases, there is evidence that there is improper use by the residents.<br>■ **Can** is in a working condition, but **contains items such as stickers or graffiti on them.** | ■ **Between 30% - 50%** of a 10 step paved area is covered by organic materials, but occurring in no more than 10% of the entire assessed area. **If occurring in more than 10% of the entire assessed area, then add 1 point.**<br>■ **Between 4 and 10 pieces of large organic materials** is on the ground.<br>■ **2 to 3 instances** of organic material accumulation caused by **standing water and poor drainage.**<br>■ The **organic material** is beginning to **turn brown**. | ■ <u>**Two** instances of **fecal matter**</u> are present on the public area. |

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# 4-SOMEWHATDIRTY



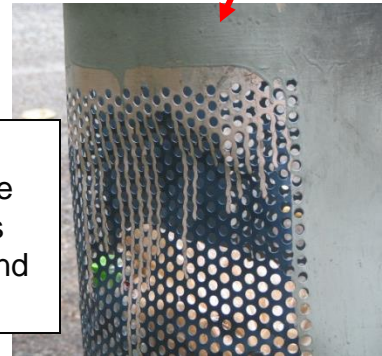Parking lot contains 4 large pieces of litter is consistently scattered
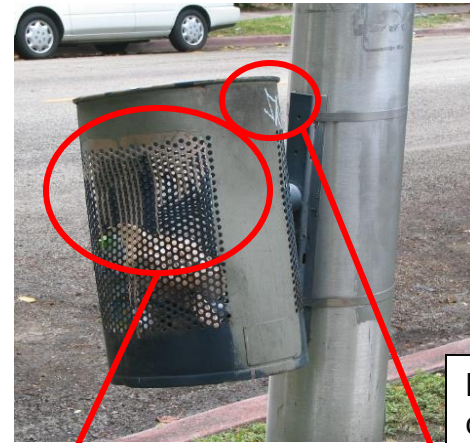
Litter Can contains graffiti. paint, and is dented

Sidewalk area contains 4 large pieces of organic material.

Litter Can contains some paint that was spilled on it and is dented.

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# 4-SOMEWHATDIRTY



Trash is consistently scattered with more than 10 small pieces in a 10 step distance.

Around 30% of a 10 step are is covered by organic material, in this a case seaweed

Trash is consistently scattered with more than 10 small pieces of small litter located in a 10 step distance.

Trash is consistently scattered with more than 10 small pieces of small litter located in a 10 step distance.

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| Index | Litter/Trash | Litter / Garbage Cans | Organic Materials | Fecal Matter |
|---|---|---|---|---|
| **5 Dirty** | • **Consistent accumulation** of trash. In a 10 step distance there are **multiple piles of trash consisting of more than 10 pieces of small litter or over 4 pieces of large litter**.<br>• If the litter density is occurring between **10 - 25% of the assessed area**, **then add 1 point** from the rating scale. | • **Can is full** and there is **trash above the rain guard and beginning to overflow** since there is no room to put additional trash. There may be evidence of **improper use** by the residents.<br>• Can has **some damage**, but is usable.<br>• **A large area** of the can contains items such as **stickers or graffiti** on them. | • **Over 50% of a 10 step** paved **area** is covered by organic materials, but occurring in no more than 10% of the entire assessed area. **If occurring in more than 10%** of the entire **assessed area, then add 1 point.**<br>• **Over 10 pieces of large organic materials** is on the ground.<br>• **3-4 instances of organic material** accumulation caused by **standing water and poor drainage.**<br>• **Faint foul odor** is present due to standing water.<br>• The **organic material** has been on the ground for some time and **has turned brown.** | • **Three** instances of fecal matter are present on the public area. |

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# 5-DIRTY



Over 4 pieces of trash is <u>accumulated</u> in the street.

Parking lot is 50% covered with organic material, which has been there for some time because it is turning brown.

Street is covered with some organic material resulting from the standing water, but it is the faint foul odor being emitted that contributes to the "Dirty" rating

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| Index | Litter/Trash | Litter / Garbage Cans | Organic Materials | Fecal Matter |
|---|---|---|---|---|
| **6 Extremely Dirty** | ▪ **Area is blocked** by an **accumulation of trash and litter**. **Illegal dumping** may be evident. **Hazardous materials** on the street. | ▪ **Can is full** and trash has **overflowed** to the ground. In some cases, there is a **rat/rodent/insect infestation**.<br>▪ **Can is damaged** and needs to be **replaced**.<br>▪ Can is **covered** of items such as **stickers or graffiti**. | ▪ **90-100% of a 10 step** paved **area** is covered with organic material. The **organic material** has been on the ground for some time and has **turned brown**.<br>▪ **Over 5 instances** of organic material accumulation caused by **standing water** and **poor drainage**.<br>▪ **Strong foul odor** is present due to standing water. | ▪ <u>**Four or more instances of fecal matter**</u> are present on the public area. |

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Illegal Dumping is evident in this location.

2005 9 8



A large accumulation of trash is present through the entire street.

10 step area is 90% covered by standing water that has been there for some time, since algae is forming on the paved area. The water is also emitting a smell.





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# QUESTIONS ?

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