

2.1 Introduction

This chapter introduces the goals and the benefits of the UCDM, which has been developed in response to the following overarching principles:

- Utilities are an integral part of the urban street;
- Well-designed utility networks help create sustainable cities;
- Land for urban RoWs is a limited resource and should be efficiently managed;
- Public streets are three-dimensional corridors;
- Utility corridors design should reflect the goals of the 2030 Plans for Abu Dhabi Emirate; and
- Utility corridors design should support Estidama principles.

2.2 Manual Goals

With the forgoing principles as a basis, the following UCDM goals aim to encourage efficient utility corridors allocation as a part of Complete Streets:

- Establish and standardise utility corridors requirements within the RoW;
- Help coordinate all stakeholders requirements and optimise approval time;
- Provide consistency of design;
- Contribute to creating a more sustainable and safe community;
- Reduce land take and ease operation and maintenance;
- Support the Emirate's economic development; and
- Minimise the detrimental visual impact of utilities on the Public Realm.

The utility corridors allocation within the UCDM balances the above goals through an integrated design approach.

2.3 Benefits of USDM/UCDM Implementation

A cost-benefit analysis was undertaken by the UPC of the Al Saad Emirati Housing development in Al Ain, which examined the impact of implementing the standards and guidelines established in its manuals. Some of the resulting benefits of successful implementation of the USDM and UCDM standards and guidelines are highlighted in the following paragraphs.

2.3.1 Improved Coordination

The UCDM stimulates and encourages coordination among stakeholders by integrating into one document all utility corridor requirements within the RoW, as defined by the USDM. These manuals also provide a common, unifying terminology for all users.



A cost benefit analysis showed a strong correlation between application of the standards and guidelines presented in these manuals and cost savings on construction, replacement, repair and maintenance.