

# Mississauga Zoning Lookup Automation

## Project Documentation

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### Overview

This Make.com automation provides address validation and geocoding for Mississauga properties, returning location coordinates and official zoning resource information.

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### What's Delivered

#### Working Components

1. **Webhook Endpoint** - Accepts property addresses via HTTP request
2. **Google Maps Integration** - Converts addresses to precise geographic coordinates
3. **Address Validation** - Confirms property is within Mississauga, Ontario
4. **JSON Response** - Returns structured data including coordinates and zoning resources

#### Data Returned

- Property address (formatted)
  - Geographic coordinates (latitude/longitude)
  - City and province confirmation
  - Links to official Mississauga zoning resources
  - Timestamp of query
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### How to Use

#### API Endpoint

Send a GET or POST request to your webhook URL with the address parameter:

```
GET https://hook.eu2.make.com/YOUR_WEBHOOK_ID?address=300 City Centre Drive, Mississauga, ON
```

## Example Response

json

```
{
  "status": "success",
  "address": "300 City Centre Dr, Mississauga, ON L5B 3C1, Canada",
  "coordinates": {
    "latitude": 43.5852972,
    "longitude": -79.6446838
  },
  "city": "Mississauga",
  "province": "Ontario",
  "zoning": {
    "message": "Zoning data requires Mississauga GIS API access. Please visit: https://www.mississauga.ca/services-and-progr",
    "interactive_map": "http://www6.mississauga.ca/missmaps/maps.aspx",
    "note": "Full automated zoning lookup requires official API credentials from City of Mississauga"
  },
  "timestamp": "2024-11-06T15:30:00Z"
}
```

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## Technical Specifications

### Make.com Scenario Components

1. **Custom Webhook** - Receives address input
2. **Google Maps API** - Geocoding service
3. **Data Formatter** - Structures response
4. **Webhook Response** - Returns JSON output

### API Integrations

- **Google Maps Geocoding API** - Address to coordinates conversion
  - **Make.com Webhooks** - Request/response handling
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## Technical Limitations

### Make.com File Size Restrictions

Make.com has a **10MB limit per HTTP request/response**. This prevents direct integration with Mississauga's zoning data files:

- **Mississauga Zoning GeoJSON:** 30.1MB (too large for Make.com)
- **Mississauga Zoning CSV:** 1.03MB (lacks coordinate data needed for lookups)

### Mississauga API Availability

According to the City of Mississauga GIS Department:

"The City of Mississauga's Planning and Building team do not allow direct live access to their Zoning data. However, periodically they do publish their Zoning data to the City's OpenData site."

#### What This Means:

- No public API exists for live zoning queries
  - Zoning data is available only as downloadable static files
  - Point-in-polygon calculations require specialized geospatial infrastructure beyond Make.com's capabilities
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## Official Mississauga Zoning Resources

Users can access official zoning information through:

1. **Interactive Map:** <http://www6.mississauga.ca/missmaps/maps.aspx>
  2. **Zoning Information Page:** <https://www.mississauga.ca/services-and-programs/building-and-renovating/zoning-information/>
  3. **Open Data Portal:** <https://data.mississauga.ca/>
  4. **City Planning Phone:** 905-615-3200 ext. 5521
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## Future Enhancement Options

To achieve full automated zoning code retrieval, the following infrastructure would be required:

### Option 1: External Geospatial Service

Integrate with Mapbox, Google Maps Platform, or PostGIS to perform point-in-polygon lookups.

- **Requirements:** Cloud hosting, geospatial API subscription
- **Estimated Cost:** \$20-50/month
- **Timeline:** 3-5 days
- **Benefit:** Full automated zoning code retrieval

## Option 2: Custom Cloud Solution

Host zoning GeoJSON on AWS S3/CloudFront with Lambda functions for lookup processing.

- **Requirements:** AWS account, custom development
- **Estimated Cost:** \$10-30/month
- **Timeline:** 2-3 days
- **Benefit:** Full control over data and lookups

## Option 3: City API Access

Request official enterprise API access from Mississauga GIS department.

- **Requirements:** Formal request to city
- **Estimated Cost:** Unknown
- **Timeline:** Unknown (requires city approval)
- **Benefit:** Direct access to official live data

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## Testing

### Test the Webhook

Use any HTTP client (Postman, curl, browser) to test:

```
bash
```

```
curl "YOUR_WEBHOOK_URL?address=100%20City%20Centre%20Drive,%20Mississauga,%20ON"
```

### Expected Behavior

- ✓ Returns coordinates for valid Mississauga addresses
- ✓ Provides official zoning resource links

- ✓ JSON formatted response
  - ✓ Timestamp included
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## What's Working

### Current Functionality

- ✓ Address validation and geocoding
- ✓ Location coordinate retrieval (latitude/longitude)
- ✓ City/province confirmation
- ✓ Integration with official zoning resources
- ✓ 24/7 uptime via Make.com infrastructure
- ✓ JSON API response format

### Accuracy

- Address geocoding provided by Google Maps (industry-leading accuracy)
  - Coordinate precision to 7 decimal places
  - Real-time Google Maps data
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## Conclusion

This automation successfully delivers address validation and geocoding for Mississauga properties. The delivered solution provides:

- ✓ **Working webhook endpoint** for address input
- ✓ **Google Maps integration** for accurate geocoding
- ✓ **Structured JSON responses** with coordinates
- ✓ **Official zoning resource links** for manual lookup

**Automated zoning code retrieval** is not possible within Make.com's native capabilities due to:

1. Make.com's 10MB file size limit (Mississauga data is 30MB)
2. City of Mississauga's lack of public API access
3. Technical requirements of geospatial point-in-polygon processing

The solution can be extended with external geospatial services if automated zoning lookup is required in the future.

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## **Blueprint File**

The Make.com scenario blueprint is included and can be imported into any Make.com account.

**Scenario Name:** Mississauga Zoning Lookup - Working Solution

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*Platform: Make.com (formerly Integromat)*

*Region: EU2 (Europe)*